THE
AMERICAN JOURNAL
OF NURSING

VOL. I | MAY, 1901 | NO. 8

ORIGINAL COMMUNICATIONS

THE EVOLUTION OF THE TRAINED NURSE*

BY E. D. FERGUSON, M.D.
Surgeon to the Samaritan Hospital, Troy, New York

(Continued from page 468.)

TURNING more directly to the work of nursing, we go back to the year 1821, when Theodore Fliedner, a Lutheran minister only twenty-one years of age, was given charge of a parish at Kaiserwerth, a small town on the Rhine just below Düsseldorf, where the people were mainly of the Roman Catholic faith and found their livelihood in a velvet industry.

This young pastor was provided with a yearly salary of one hundred and thirty dollars, hardly "passing rich on forty pounds a year," and even that was soon nearly lost through the failure of a velvet manufacturer who had given employment to most of his parishioners.

Our hero was the son of a Lutheran clergyman, and had ploddingly passed through his ecclesiastical course with no promise of greatness, hardly of common success.

He carried, however, into all his work, from the beginning of his school duties to the end of his life, sincerity of purpose and tenacity in method. He had doubtless heard of the work of John Howard and Mrs. Fry, and his sense of the injustice that closed the gates leading to honest employment, and possibly worldly redemption in the case of discharged women convicts, led him to consider earnestly and carefully

* Address delivered at the opening of the Nurses' Home of the Samaritan Hospital, Troy, New York.

what could be done for them, though he was then devising methods to continue the work of his parish after the loss of the main source of support.

To provide an endowment for his church he went among his Evangelical friends in Germany, Holland, and England, where he not only had a measurable success in securing funds for his parish, but he had the opportunity to observe the need of a change of method in the administration of prisons and hospitals, and he doubtless discussed the problems with those who, like him, were moving for such a change.

Though the condition of the inmates of the prisons and hospitals, for we may properly class them together from many stand-points, was such as to appeal to all those who knew the facts and whose hearts impelled blood rich enough to develop sympathy, the question of what to do about it did not admit a ready answer.

Conservatism is at once the most useful and the most injurious of social notions, and to break the bonds of custom, strong through habit and vested interests, requires often the strength of an intellectual and physical Hercules.

How should this simple Lutheran pastor, with only the resources of what might be termed a parish of paupers, hope to accomplish the work that was untouched in Germany and still needed so much in England in spite of the labors of Howard and Mrs. Fry?

In his desire for opportunity to investigate, he even requested to be committed to prison, and there was not enough of humor in the German mind to gratify him as a joke. He did finally secure the privilege—and, mark, it was a privilege—of holding religious services fortnightly in the prison at Düsseldorf. He associated himself with others in agitation and efforts to devise ways and means towards reform, and in 1826 was organized the first Prison Reform Society in Germany. It was early felt by Fliedner that if great good was to be achieved the work could not stop at improvement in prison care, but the hand of encouragement must be extended to the convict as she passed out of the prison gate, not in a sentimental, but in a practical way.

We should also understand that our young pastor had taken a wife, and the cares incident to a growing family must have pressed upon him, but in his garden was a summer-house, which with his own hands he converted into a shelter from cold and storm, and in 1833 he virtually said to a poor Magdalen as she passed from the prison, "Follow me, and I will find a home for you." The work having been begun in this way, the needs of the sick poor of the vicinity came pressing on him, so that he began to plan for their care, and the scheme grew into a small hospital installed in an abandoned velvet factory. No mawkish sentimen-

tality came into Fliedner's mind or plans, and we may even believe that he showed at times a measure of German bluntness, and once at least of rudeness. His prison waifs could not at first be given tasks implying confidence,—they must win their way through humble service to such position of trust and work as their efforts and abilities could earn,—but he found employment for them in domestic affairs in connection with his hospital, and though doubtless he must have seen failures in the refractory material composing the convict class, he had many triumphs in this fight for godliness and righteousness.

To his practical mind one of the crying needs in administration was to supply intelligent and devoted service in the nursing department of the hospital.

Again attention is called to the fact that skilled nursing did not then exist. Not only was there no opportunity for nurses to secure a training, but only persons of inferior mental or social standing could usually be found to care for the sick, aside from the limited field occupied by the Sisters of Charity, and even with them there was no systematic training. However wealthy or refined the patient might be, however great might be the need for gentle, intelligent, and skilled care, it could not be had. This defect our German organizer saw, but only in so far as it applied to institutional care, for he even probably failed to grasp how his work would grow and deepen into the result that now allows in so many households the comfort and help of trained nursing.

In considering the problems connected with this need, Fliedner concluded that a combination of ecclesiastical motive with practical training would secure the best result, hence his idea of reviving the early established but long disused order of deaconesses.

To this work he invited Lutheran women, creating for them an order, establishing for them a home, and providing for them a system of training. One of the fundamental principles in his scheme was obedience, that the nurse-sister should go and come and do as was ordered by her superior, and that without question or comment so long as it was in the line of duty. The organization vows of the deaconesses pledged them to the care of the poor, the sick, and the young. Their vows were not made in perpetuity, but it is probable that to the Protestant mind this was rather an element of strength and growth.

In 1836 his small hospital and deaconesses' home were opened, to which was soon added an infant school, then a training-school for teachers in infant classes. In 1842 an orphanage for orphan girls of the middle class and in 1847 an asylum for lunatic women were opened.

The home for deaconesses that he founded at Kaiserwerth soon ceased to be alone, for Fliedner's activities extended beyond the con-

fines of his little parish, and he gave personal attention and assistance in the establishment and management elsewhere of institutions like his own.

In 1849 he resigned his pastoral work, the duties of which had been conscientiously discharged up to that time, and for two years travelled extensively in Europe, Asia, and America to establish what was termed "Mother Houses," *i.e.*, homes for the deaconesses, from which their actual work could be done, and from which daughter houses might bud and fruit. His last work is even poetical in its denomination, being the establishment at Kaiserwerth of the "House of Evening Rest" for those deaconesses who had passed the period of active duty.

In 1864 death terminated the labors of this remarkable man, but there then existed over one hundred establishments or stations with four hundred and thirty deaconesses, from Jerusalem in the East to the prairie cities of our own country.

It is probable that he took little interest in the theological problems that stirred Germany during his active lifetime, and the fact that he was a Lutheran was an incident of birth and nationality. Such a character is not the product of any ecclesiastical organization, but one who has his gifts and the opportunity will do good work in any land and under any religion. His was eminently the religion of deeds, and his life exemplifies the truth of the adage, "*Laborare est orare.*"

(To be continued.)

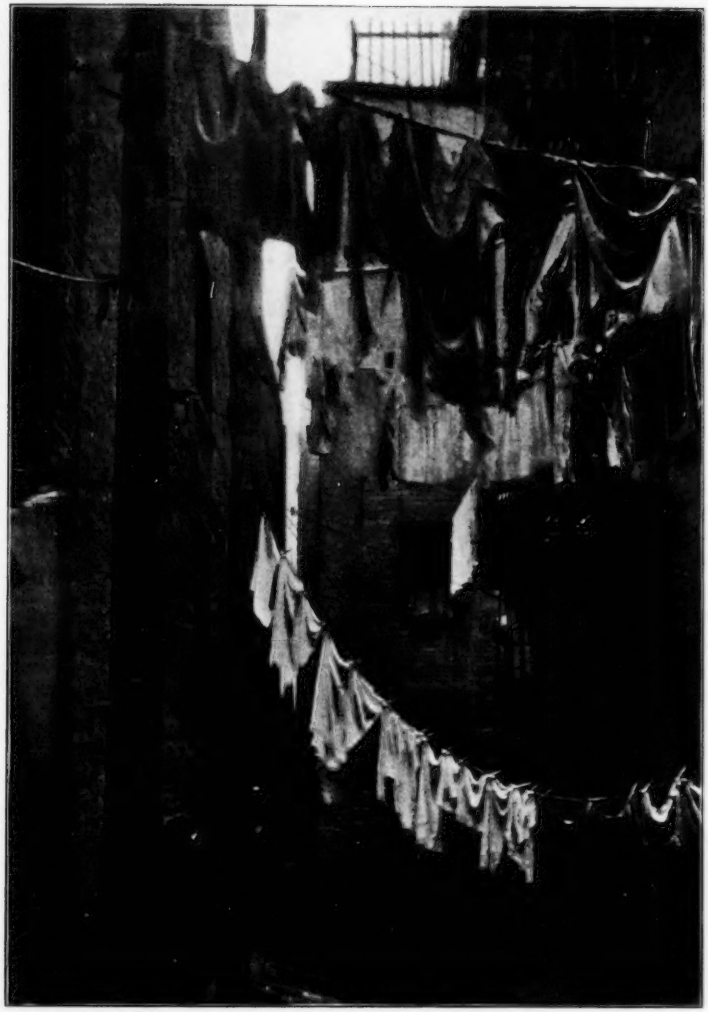
EXTRACTS FROM THE REPORT OF THE TENEMENT-HOUSE COMMISSION, NEW YORK, 1901

By L. L. DOCK

(By permission)

Of all the great social problems of modern times incident to the growth of cities none is claiming public attention in a greater degree than that of the housing of the working people. Mere housing, however, —that is, merely providing shelter,—does not solve this problem. It only aggravates it by herding men and women together under conditions which inevitably tend to produce disease and crime. . . .

In most cities the housing problem is the problem of the small house rather than of the large tenement. . . . In New York, however, as in no other city in the land, it is the problem of the tenement-house,—the five-, six-, or even seven-story building, usually on a lot twenty-five feet in width and with as many as four families on each floor. . . .



A TYPICAL "BACK YARD," NEW YORK CITY

(See article on the Report of the Tenement-House Commission, 1901)

The housing problem is not a new question. It began to claim attention in England and in this country in the early part of the nineteenth century. . . . So much effort has been expended in European cities to remedy the evils of bad housing, that the commission had hoped to find in such cities useful suggestion and precedent. . . . Study in this direction has demonstrated beyond question that it is in New York that the most serious tenement-house problem in the world is to be found. . . .

THE TYPICAL NEW YORK TENEMENT.

It is known as the "double-decker," "dumb-bell" tenement, a type which New York has the unenviable distinction of having invented. It is a type unknown to any other city in America or Europe.

It is a building usually five or six or even seven stories high, about twenty-five feet wide, and built upon a lot of the same width and about one hundred feet deep. The building as a rule extends back ninety feet, leaving the small space of ten feet unoccupied at the rear, so that the back rooms may obtain some light and air. This space has continued to be left open only because the law has compelled it. Upon the entrance floor there are usually two stores, one on each side of the building, and these sometimes have two or three living-rooms back of them. In the centre is the entrance hallway, a long corridor less than three feet wide and extending back sixty feet in length. This hallway is nearly always totally dark, receiving no light except that from the street door and a faint light that comes from the small windows opening upon the stairs, which are placed at one side of the hallway.

Each floor above is generally divided into four sets of apartments, there being seven rooms on each side of the hall extending back from the street to the rear of the building. The front apartments generally consist of four rooms each and the rear apartments of three, making altogether fourteen rooms upon each floor, or in a seven-story house eighty-four rooms, exclusive of the stores and rooms back of them.

Of these fourteen rooms on each floor only four receive direct light and air from the street or from the small yard at the back of the building. Generally, along each side of the building is what is termed an "air-shaft," being an indentation of the wall to a depth of about twenty-eight inches, and extending in length for a space of from fifty to sixty feet. The shaft is entirely enclosed on four sides, and is, of course, the full height of the building, often from sixty to seventy-two feet high.

The ostensible purpose of the shaft is to provide light and air to the five rooms on each side of the house which get no direct light and air from the street or yard; but as the shafts are narrow and high, being enclosed on all sides and without any intake of air at the bottom,

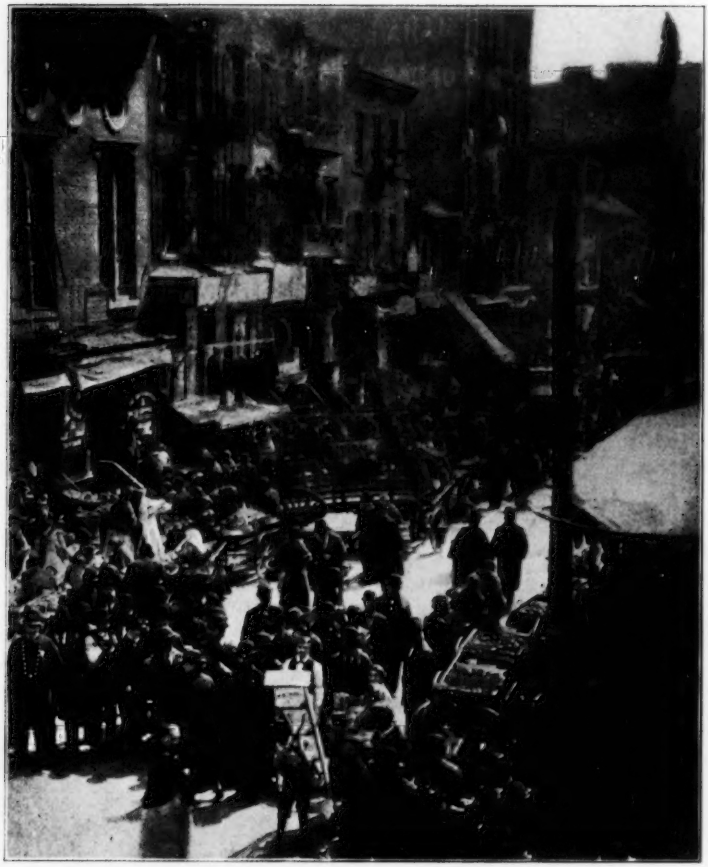
these rooms obtain, instead of fresh air and sunshine, foul air and semi-darkness. Indeed, it is questionable whether the rooms would not be more habitable and more sanitary with no shaft at all, and depending for their light and air solely upon the front and back rooms into which they open, for each family, besides having the foul air from its own rooms to breathe, is compelled to breathe the emanations from the rooms of some eleven other families. Nor is this all; these shafts act as conveyers of noise, odors, and disease, and when fire breaks out serve as inflammable flues, often making it impossible to save the building from destruction.

A family living in such a building pays for four rooms of this kind a rent of from twelve dollars to eighteen dollars a month. Of these four rooms only two are large enough to be deserving of the name of rooms. The front one is generally about ten feet six inches wide by eleven feet three inches long; this the family use as a parlor, and often at night, when the small bedrooms opening upon the "air-shaft" are so close and ill-ventilated that sleep is impossible, mattresses are dragged upon the floor of the parlor, and there the family sleep, all together in one room. In summer the small bedrooms are so hot and stifling that a large part of the tenement-house population sleep on the roofs, the sidewalks, and the fire-escapes.

The other room, the kitchen, is generally the same size as the parlor, on which it opens, and receives all its light and air from the "air-shaft," or such a supply of it as may come in from the front room. Behind these two rooms are the bedrooms, so called, which are hardly more than closets, being each about seven feet wide and eight feet six inches long, barely large enough to contain a bed.

These rooms get no light and air whatever except that which comes from the "air-shaft," and except on the highest stories are generally almost entirely dark. Upon the opposite side of the public hall is an apartment of four exactly similar rooms, and at the rear of the building there are, instead of four rooms on each side, but three, one of the bedrooms being dispensed with. For these three rooms in the rear the rent is usually, throughout the city, from ten dollars to fifteen dollars a month. In the public hallways, opposite the stairs, there are provided two water-closets, each one being used in common by two families, and being lighted and ventilated by the "air-shaft," which also lights and ventilates all the bedrooms.

It is not to be wondered at, therefore, that the tenement-house system has become fraught with so much danger to the welfare of the community. . . . There is hardly a tenement-house in which there has not been at least one case of pulmonary tuberculosis within the last five years,



THE MOST DENSELY POPULATED SPOT IN THE WORLD, HESTER STREET, NEW YORK CITY

(See article on the Report of the Tenement-House Commission, 1901)

and in some there have been as many as twenty-two different cases of this terrible disease. . . . From the tenements comes a stream of sick, helpless people to the hospitals and dispensaries, few of whom are able to afford the luxury of a private physician, and some houses are in such bad sanitary condition that few people can be seriously ill in them and get well. . . . The most terrible of all the features of tenement-house life in New York, however, is the indiscriminate herding of all kinds of people in close contact; the fact that, mingled with the drunken, the dissolute, the diseased, dwell the great mass of the respectable workingmen of the city with their families.

(To be continued.)

EARLY STRUGGLES WITH CONTAGION

By ELLEN LA MOTTE
Johns Hopkins Hospital

Old as the history of civilization is the history of the great diseases that have preyed upon mankind. The most ancient records, the works of the earliest historians, contain accounts of great plagues and pestilences which were subject to neither check nor bound, and which, once started, would sweep through whole communities or countries until the supply of victims was exhausted. These diseases were originated in and cultivated by a total lack of the commonest laws of hygiene; they were combated only by the religious rites and impotent methods of ignorance, and further increased and propagated by the commercial activity of nations.

Leprosy was rife. It is one of the oldest of known diseases, having existed in Egypt some three or four thousand years before Christ. During the Middle Ages the number of lazar houses in Europe alone is estimated at twenty thousand; the number of individual cases and of separated colonies must therefore have brought the aggregate up to enormous figures. It was a disease that attacked rich and poor alike, and was met with everywhere in the civilized world.

The plague, or, as we now call it, bubonic plague, was perhaps the most terrible of all these diseases. It has been known to history since the second century, A.D., and from the sixth to the seventeenth century prevailed throughout Europe in epidemics of varying intensity. London seemed particularly subject to it. On an average of every decade or so, though sometimes as often as every three or four years, and again at intervals of twenty or thirty, there would be outbreaks of more or

less severity. The climax was reached, however, in the great plague of 1665, in which a hundred thousand people are supposed to have perished.

But probably the most virulent, as well as the most fatal, of all of these diseases was small-pox. It was known in China for several hundred years before Christ, and became widespread throughout Europe at the time of the Crusades. It was first brought to America by the Spanish conquerors in the sixteenth century. Leprosy could be controlled by segregation; the plague confined itself to epidemics, tremendous enough, some of them, but with periods of practical quiescence between the outbreaks, but small-pox was ever present in the community, as much a recognized factor as tuberculosis or pneumonia is in our day. At times it broke out into epidemics more or less severe, but it prevailed for the most part as an enormous, ever-present source of danger. A most conservative estimate placed the annual mortality in London as late as the period between the years 1760 and 1800 at from two to five thousand per million living. No one was safe. Its presence was as familiar in the King's household as in the humblest laborer's; all classes and conditions of men were impartially smitten and decimated by this terrible disease.

In the year 1716 there was living in London a woman famed as the cleverest and most beautiful of the day. She was Lady Mary Wortley Montagu, a duke's daughter, "a great figure in a great society," a woman of influence and enthusiasm. In common with the majority of people in those days, she also had been a victim to small-pox, which "had deprived her of very fine eyelashes," though this fact does not seem to have marred her beauty. Her husband, Mr. Wortley Montagu, being at this time appointed ambassador to Turkey, she decided to accompany him to the Porte, undertaking thereby a journey which no woman, and very few men, had ever before attempted. To travel across the continent of Europe, through countries unsettled by wars, infested by robbers, over roads difficult and dangerous, was an act unprecedented. The effect was naturally heightened by Lady Montagu's rank and position, and the interest in the undertaking was further increased and sustained by a series of letters which she wrote at various points along the route, and which excelled in wit and force even in those days when letter-writing was a fine art.

It is in one of these, written at Constantinople, April 1, 1717, that we first find mention of that custom of inoculation that was soon to become so inseparably associated with her name:

"I am going to tell you a thing that will make you wish yourself here. The small-pox, so fatal and so general amongst us, is here entirely

harmless by the invention of engrafting, which is the term they give it. There is a set of old women who make it their business to perform the operation every autumn, in the month of September, when the great heat is abated. People send to one another to know if any of their family has a mind to have the small-pox; they make parties for this purpose, and when they are met (commonly fifteen or sixteen together), the old woman comes with a nutshell full of the matter of the best sort of small-pox and asks what veins you please to have opened. She immediately rips open that you offer to her with a large needle (which gives you no more pain than a common scratch), and puts into the vein as much matter as can lie upon the head of her needle, and after that binds up the little wound with a hollow bit of shell."

Lady Montagu then describes a custom of the Greeks, who have a vein opened in the forehead, one in the breast, and one in each arm, to mark the sign of the cross, but, as she naïvely concludes, "this has a very ill effect, all these wounds leaving little scars, and is not done by those who are not superstitious, who choose to have them in the legs, or that part of the arm that is concealed." She then further declares her intention of trying this experiment on her little son, and of bringing this "useful invention" into fashion upon her return to England.

Her estimate of her ability in this direction was not mistaken. Upon her return in 1718 her little daughter was inoculated, as was the child of a London physician, and the physician of the embassy inoculated in London under her patronage. An account of the "practices and advantages" of the custom was sent to persons in the British Court, and at this moment the Princess Anne was seized with a most opportune attack of small-pox. Experiments were hastily made on some condemned criminals, and by the consent of the King, George I., the new discovery was then successfully practised upon her.

We can imagine Lady Montagu's delight. Yet, notwithstanding these successes and the ardor with which she propagated her new faith, the practice gained popularity very slowly. We find Steele congratulating Lady Mary on the "godlike delight of saving many thousand British lives," yet as a matter of fact, for the first eight years after its introduction only eight hundred and forty-five persons had been inoculated.

By 1740 the custom had fallen into neglect or disuse. It was revived from time to time as fresh impetus was given by favorable reports of its practice, but for the most part, though of recognized value, was not to a great extent made use of. The reason for this was obvious. By inoculation small-pox was rendered milder and safer for the individual, but extensively spread throughout the community, since

a person suffering from the milder, inoculated form was as great a source of danger as if he had contracted the disease by natural methods. Calculations based on periods of forty years each before and after its introduction show the mortality to be seventy-two to the thousand before and eighty-nine to the thousand after the custom came into use—a sufficient increase to make it of very doubtful benefit. In Spain it was prohibited entirely. In France it was encouraged till a violent outbreak of small-pox resulted, when its use was abolished by law. In Germany and Russia it was resorted to in desultory fashion, but towards the close of the century the consensus of opinion seemed to be strongly against its use.

For many generations a belief had obtained in rural England that a person having an attack of cow-pox, a disease frequent among cattle, was protected against other contagion of small-pox. So prevalent was this belief that we even find a farmer, Benjamin Jesty, inoculating his wife and two children with cow-pox virus in the year 1770, at a time when the usual small-pox inoculation was much discredited. These farmers' tales, or superstitions, as they were considered, came to the ears of Edward Jenner, born in 1749, and at this time a youth of seventeen or so, and apprenticed to a country physician for the purpose of studying medicine. A young woman came in to consult his master one day, and at the mention of small-pox exclaimed, "I cannot take that disease—I have had cow-pox."

This remark made a deep impression on Jenner's mind. Two years later, when he was about twenty, he went to London to study medicine under the great Hunter, and to him he repeated this and similar other incidents that showed the common belief of the country folk. In return, Hunter's famous "Do not think, but try; be patient, be accurate," was the reply which stimulated all the years of careful study which were to follow.

Jenner remained in London for two years, at the end of which time he returned to his native Gloucestershire to take up the life of a simple country physician, but at the same time never to lose sight of the problem that he was determined to solve. He was himself convinced of the value of this as early as 1780, and the medical societies to which he belonged voted him a bore for his constant introduction of his favorite topic. But at last, at the end of sixteen years of slow investigation, he was able to make the first practical demonstration of his wonderful discovery. In 1796 he took virus from the hand of a dairymaid affected with cow-pox and introduced it into the hand of a young boy, who a few weeks later was inoculated with small-pox virus and successfully resisted the disease. Similar experiments were later performed on a

hundred children, all of whom resisted subsequent small-pox inoculations, and in 1798 the famous treatise appeared, entitled "An Inquiry into the Cause and Effects of the Variola Vaccinæ, a Disease discovered in some of the Western Counties of England and known by the Name of Cow-pox."

Jenner's report attracted widespread attention. Vaccination rapidly came into use, and with its success the usual disputes common in such cases as to the priority of its discovery, followed later by attempts to cast utter discredit upon its value. Notwithstanding these controversies, however, the credit of the discovery remained where it belonged, and Jenner found himself the most famous man of the day, obtaining a recognition and distinction which no physician, before or since, has ever received.

The practice of vaccination is now almost general throughout the civilized world. Of its actual value little need be said. Owing to the disappointment, however, which followed the high hopes at first entertained, that by its use permanent immunity was assured, and in addition the unfortunate development of certain diseases through the use of impure lymph, violent reactions in public sentiment have from time to time arisen. Even to-day, when statistics seem to prove that a decrease in small-pox is directly proportionate to the thoroughness with which vaccination is carried out, there still exists large communities in which the custom is prohibited either by law or popular prejudice, and we find the opinions of the "anti-vaccinationists" supported by those of many educated and intelligent men.

Despite, however, this hostile sentiment, which for a century has continued, though it fortunately has not grown in proportion to the favor with which vaccination has been received, the value of the discovery is placed beyond dispute by the opinion of the great majority of physicians and laity throughout the world. This, together with the recent protective discoveries of our own day, and aided by the results attained by segregation and by the natural growth of better sanitation and hygiene, is bringing us within sight of the day when those diseases which for centuries have held humanity in subjection shall themselves be brought into subjection and under control.

References

Baron's "Life of Jenner."
Lady Montagu's "Letters."
Russell's "The Wonderful Century."
Gentleman's Magazine, September, 1757.
Edinburgh *Review*, October, 1806. Dr. Willan on "Vaccination."
Osler's "Practice of Medicine."
Encyclopædias, British and American.
"London," by Walter Besant.

METHODS OF DISINFECTION RECOMMENDED BY THE DEPARTMENT OF HEALTH OF THE CITY OF NEW YORK

DISINFECTION AND DISINFECTANTS

SUNLIGHT, pure air, and cleanliness are always very important agents in maintaining health and in protecting the body against many forms of illness. When, however, it becomes necessary to guard against such special dangers as accumulated filth or contagious diseases, disinfection is also essential. In order that disinfection shall afford complete protection, it must be thorough, and perfect cleanliness is better, even in the presence of contagious disease, than poor disinfection.

All forms of fermentation, decomposition, and putrefaction, as well as the infectious and contagious diseases, are caused by minute living germs. The object of disinfection is to kill these germs. Decomposition and putrefaction should at times be prevented by the immediate destruction or removal from the neighborhood of the dwelling of all useless putrescible substances. Impure air, especially air from sewers, cesspools, putrefactive matter, etc., causes conditions in man which are very favorable to the contraction of contagious diseases.

In order that the sick-room shall be readily kept clean and as free as possible from the germs causing the infectious diseases, it is important that all articles not necessary for immediate use in the care of the sick person, especially upholstered furniture, carpets, curtains, and bric-a-brac, should be removed from the room to be occupied by the sick person. If another room has already been occupied, it must be disinfected.

AGENTS FOR CLEANSING AND DISINFECTION

Too much emphasis cannot be placed upon the importance of sunlight, fresh air, and cleanliness, both as regards the person, the dwelling, and its surroundings, in preserving health and protecting the body from all kinds of disease. Sunlight and fresh air should be freely admitted through open windows, and personal cleanliness should be attained by frequently washing the hands and body.

Cleanliness in dwellings and other places may, under ordinary circumstances, be maintained by the use of the three following solutions:

1. SOAPSUDS SOLUTION.—For simple cleansing, or for cleansing before or after the methods of disinfection by chemicals described below, one ounce of common washing soda should be added to twelve quarts of hot soap (soft soap) and water.

2. STRONG SODA SOLUTION.—This, which is a stronger and more effective cleansing solution, is made by dissolving one-half pound of

common washing soda in three gallons of hot water. The solution thus obtained should be applied by scrubbing with a hard brush.

3. WEAK SODA SOLUTION.—This is made by dissolving one ounce of common washing-soda in twelve quarts of hot water.

When it becomes necessary to arrest putrefaction or to prevent the spread of contagious diseases by killing the living germs which cause them, more powerful agents must be employed than those required for simple cleanliness, and these are called disinfectants. The following are some of the most reliable disinfectants:

4. HEAT.—Complete destruction by fire is the best method of disposing of infected articles of small value; but continued high temperatures not as great as that of fire will destroy all forms of life. Thus, boiling or steaming in closed vessels for one-half hour, or boiling in the weak soda solution in open vessels for the same time, will destroy all disease germs. Dry heat is not so effective a germ destroyer as moist heat, except at much higher temperatures, which will destroy or injure many combustible materials.

5. CARBOLIC ACID SOLUTION—LYSOL-CREOLIN.—Dissolve six ounces of carbolic acid in one gallon of hot water. This makes approximately a five per cent. solution of carbolic acid, which for many purposes may be diluted with an equal quantity of water. Great care must be taken that the pure acid does not come in contact with the skin, as it is very corrosive. The commercial colored impure carbolic acid should not be used in watery solutions, as it contains a large percentage of cresol, which is insoluble in water and has therefore little value. The two alkaline solutions of cresol, named lysol and creolin, are strong disinfectants and non-corrosive, and can be used in place of the solutions of carbolic acid of equal strength.

6. BICHLORIDE SOLUTION (*bichloride of mercury or corrosive sublimate*).—Dissolve sixty grains of pulverized corrosive sublimate and two tablespoonfuls of common salt in one gallon of hot water. This makes approximately a 1 to 1000 solution. This solution must be kept in glass, earthen, or wooden vessels (not in metal vessels), and is not to be used for disinfecting metal articles.

The carbolic and bichloride solutions are very poisonous when taken by the mouth, but are harmless when used externally.*

* The cost of the carbolic solution is much greater than that of the other solutions, but generally this solution is to be much preferred. When the cost is an important element, the bichloride solution may be substituted for all purposes for which the carbolic solution is recommended, except for the disinfection of discharges, eating utensils, and articles made of metal, and of clothing, bedding, etc., which is very much soiled. Its poisonous character must be kept constantly in mind.

7. Milk of Lime.—This mixture is made by adding one quart of dry freshly slaked lime to four or five quarts of water. (Lime is slaked by pouring a small quantity of water on a lump of quick-lime. The lime becomes hot, crumbles, and as the slaking is completed a white powder results. The powder is used to make milk of lime.) Air-slaked lime has no value as a disinfectant.

8. Dry Chloride of Lime.—This must be fresh and must be kept in closed vessels or packages. It should have the strong pungent odor of chlorine.

Chlorinated Lime Solution.—This solution is made by adding six ounces of fresh chloride of lime, having a strong odor of chlorine, to one gallon of water. It must be well mixed and should be prepared one hour before using. This solution, when fresh, is a reliable disinfectant and deodorizer.

9. Formalin.—This is a forty per cent. solution of formaldehyde gas in water. It is, in a five per cent. solution, an efficient disinfectant and deodorizer. A method which gives fairly efficient results is to hang large cloths (sheets) in the room and sprinkle or spray them with formalin, as recommended by the Chicago Health Department. For each one thousand cubic feet of space in the room ten ounces of formalin should be used.

10. Sulphurous Acid Gas (the gas produced by burning sulphur) is a fairly efficient germicide under certain definite conditions. These conditions are, in brief, that all the germs should be freely exposed to the gas in a tightly closed room for at least eight hours, that the air of the room should be moist, and that the amount of gas should be that generated by burning at least three pounds of sulphur for every one thousand cubic feet of air-space.

The proprietary disinfectants which are so often widely advertised, and whose composition is kept secret, are relatively expensive and often unreliable and inefficient. It is important to remember that substances which destroy or disguise bad odors are not necessarily disinfectants.

METHOD OF DISINFECTION IN INFECTIOUS AND CONTAGIOUS DISEASES

The most important diseases to be guarded against by disinfection are scarlet fever, measles, diphtheria, tuberculosis (consumption), smallpox, typhoid and typhus fever, yellow fever, and cholera.

1. Hands and Person.—Dilute the carbolic acid, lysol, or creolin solutions with an equal amount of water, or use the bichloride solution

without dilution. Hands soiled in caring for persons suffering from contagious diseases or soiled portions of the patient's body should be immediately washed with one of these solutions, and then thoroughly washed with soap and water. The nails should always be kept perfectly clean with a brush or nail-cleaner. Before eating the hands should be first washed in one of the above solutions, then thoroughly scrubbed with soap and water by means of a brush, and finally dipped again in the disinfectant.

2. Soiled Clothing, Towels, Napkins, Bedding, etc., should be immediately immersed, in the sick-room, in boiling water for one half hour or in the carbolic solution for twelve hours. They can then be wrung out and washed in the usual way. Articles such as beds, woollen clothing, etc., which cannot be washed should be referred to the Health Department for disinfection or destruction.

3. Food and Drink.—Food thoroughly cooked and drinks that have been boiled are free from disease germs. Food and drinks, after cooking or boiling, if not immediately used, should be placed when cool in clean dishes or vessels and covered. In presence of an epidemic of cholera or typhoid fever, milk and water used for drinking, cooking, washing dishes, etc., should always be boiled before using, and when cholera is prevalent all persons should avoid eating uncooked fruit, fresh vegetables, and ice.

4. Discharges of all kinds, from the Mouth, Nose, Bladder, and Bowels of patients suffering from contagious diseases should be received into glass or earthen vessels containing the carbolic solution or milk of lime, or they should be removed on pieces of cloth, which are immediately burnt or immersed in one of these solutions. Special care should be observed to disinfect at once the vomited matter and the intestinal discharges from cholera patients, as these alone contain the dangerous germs. In typhoid fever the intestinal discharges and urine, and in diphtheria, measles, and scarlet fever the discharges from the throat and nose, all bring about infection and should be treated in the same manner. The volume of the solution used to disinfect discharges should be, with the carbolic solution at least twice as great as that of the discharge, or with milk of lime from four to five times as great. After standing for an hour or more, the disinfecting solution, with the discharges, may be thrown into the water-closet. Cloths, towels, napkins, bedding, or clothing soiled by the discharges must be at once placed in the carbolic solution and the hands of the attendants disinfected as described above. In convalescence from measles and scarlet fever the scales from the skin (peeling) are also carriers of infection. To prevent

the dissemination of disease by means of these scales the skin should be carefully washed daily in warm soap and water. The external use of vaseline for the same purpose is recommended. After use the soapsuds should be thrown into the water-closet and the vessel rinsed out with carbolic solution.

The ordinary house filtration of water does not remove all the germs of disease and cannot be depended upon to render the water safe in time of danger.

The intestinal discharges (feces) need special treatment on account of the difficulty with which the disinfectant fluids penetrate to all portions. To thoroughly disinfect a mass of feces it is necessary to add to it double its amount of one of the strong disinfecting solutions and allow it to soak for twelve hours. If desired to hasten the process, the fecal matter covered by a carbolic acid or formalin solution can be thoroughly mixed with the disinfectant, allowed to stand for one hour, or thoroughly disinfected by boiling for thirty minutes.

5. The Sputum from Consumptive Patients.—The importance of the proper disinfection of the sputum (expectoration) from consumptive patients is little understood. Consumption is a contagious disease, and is always the result of transmission from the sick to the healthy or from animals to man. The sputum contains the germs which cause the disease, and in great majority of cases is the source of infection. After being discharged, unless properly disposed of, it may become dry and pulverized and float in the air as dust. This dust contains the germs and is the common cause of the disease through inhalation. In all cases therefore the sputum should be disinfected when discharged. It should be received into covered cups containing the carbolic, lysol, or formalin solutions. Handkerchiefs soiled by it should be burned, or soaked in the carbolic solution and then boiled. Dust from the walls, mouldings, pictures, etc., in rooms that have been occupied by consumptive patients contains the germs and will produce tuberculosis in animals when used for their inoculation. Therefore rooms should be thoroughly disinfected before they are again occupied. Rooms in which consumptives are living should never be dusted with a dry cloth or brush, but should always be cleansed by wiping furniture, mantels, etc., with a damp cloth. This cloth should afterwards be burnt or disinfected by soaking it in the carbolic or chlorinated lime solution or by boiling in the weak soda solution for half an hour. Carpets should be thoroughly swept with a broom wrapped in a damp cloth, the latter being afterwards disinfected as above. If the sputum of all consumptive patients were destroyed at once when discharged, a large proportion of the cases of the disease would be prevented.

6. CLOSETS, KITCHEN AND HALLWAY SINKS, ETC.—Each time the closet is used for infected discharges one pint of the carbolic solution should be poured into the pan (after it has been emptied) and allowed to remain there. All discharges should be disinfected carefully before being thrown into the closet. Sinks should be flushed at least once daily.

7. DISHES, KNIVES, FORKS, SPOONS, etc., used by a patient should be kept for his exclusive use and not removed from the room. They should be boiled or washed first in the carbolic solution, then in hot soap-suds, and finally rinsed in hot water. These washing fluids should afterwards be thrown into the water-closet. The remains of the patient's meals may be burned or thrown into a vessel containing one of the disinfectant solutions and allowed to stand for one hour before being thrown away.

8. ROOMS AND THEIR CONTENTS.—Rooms which have been occupied by persons suffering from contagious disease should not be again occupied until they have been thoroughly disinfected by the Health Department and renovated by the owner. For this purpose either careful fumigation with sulphur or formaldehyde gas will be employed, or one of these combined with the following procedure: Carpets, curtains, and upholstered furniture which have been soiled by discharges, or which have been exposed to infection in the room during the illness, will be removed for disinfection by steam. Woodwork, floors, and plain furniture will be thoroughly washed with the soapsuds and bichloride solutions.

Books, leather articles, and those which are readily discolored will be removed by the Department and disinfected by exposing them for twelve hours to formaldehyde vapor in a small chamber.

9. RAGS, CLOTHES, AND ARTICLES OF SMALL VALUE which have been soiled by discharges from the patient or infected in other ways should be burned.

10. IN CASE OF DEATH, the body should be completely wrapped in several thicknesses of cloth wrung out of the carbolic or bichloride solution and placed in an hermetically sealed coffin.

If notified, the Department of Health of New York City will disinfect rooms and their contents without cost to the tenant after the rooms have been vacated by persons convalescent from any contagious disease. Notification should be sent to the Chief Inspector of Contagious Diseases, Sixth Avenue and Fifty-fifth Street. Telephone Call, No. 1204 Columbus.

It is important to remember that an *abundance of fresh air, sunlight, and absolute cleanliness* not only helps protect the attendants from

infection, but also aids in the recovery of the sick. Sunlight is one of the most effective disinfectants known, killing all germs directly exposed to it within a few hours.

METHODS OF CLEANLINESS AND DISINFECTION TO PREVENT THE OCCURRENCE OF ILLNESS

1. Water-Closet Bowls and all Receptacles for Human Excrement should be kept perfectly clean by frequent flushing with a large quantity of water, and as often as necessary disinfected with the carbolic or chlorinated lime solutions. The woodwork around and beneath them should be frequently scrubbed with the hot soapsuds solution.

2. Sinks and the Woodwork around and the Floor beneath them should be frequently and thoroughly scrubbed with the hot soapsuds solution.

3. School Sinks.—School sinks should be thoroughly flushed with a large quantity of water at least twice daily, and should be carefully cleaned twice a week or oftener by scrubbing. Several quarts of the carbolic or chlorinated lime solutions should be frequently thrown in the sink after it has been flushed.

4. Cesspools and Privy Vaults.—An abundance of milk of lime, dry chloride of lime, or chlorinated lime solution (at least four times the amount of the excreta to be disinfected) should be thrown into these daily, and their contents should be frequently removed.

5. Cellars and Rooms in Cellars are to be frequently whitewashed, and, if necessary, the floors sprinkled with fresh, dry chloride of lime. Areas and Paved Yards should be cleaned, scrubbed and, if necessary, washed with the bichloride solution. Street Gutters and Drains should be cleaned and when necessary sprinkled with chloride of lime or washed with milk of lime.

6. Air-Shafts.—Air-shafts should be first cleaned thoroughly and then whitewashed. To prevent tenants throwing garbage down air-shafts, it is advisable to put wire netting outside of windows of apartments opening on shafts. Concrete or asphalt bottoms of shafts should be cleaned and washed with the bichloride solution, or sprinkled with chloride of lime.

7. Hydrant Sinks, Garbage Receptacles, and Garbage and Oyster-Shell Shutes and Receptacles should be cleaned daily and sprinkled with dry chloride of lime.

8. Refrigerators and the Surfaces around and beneath them, Dumb-Waiters, etc., may be cleaned by scrubbing them with the hot soapsuds solution.

9. Traps.—All traps should be flushed daily with an abundance of

water. If at any time they become foul, they may be cleaned by pouring considerable quantities of the hot strong soda solution into them, followed by the carbolic solution.

10. URINALS AND THE FLOORS AROUND AND UNDERNEATH THEM should be cleaned twice daily with the hot soapsuds solution, and in addition to this, if offensive, they may be disinfected with the carbolic solution.

11. STABLE FLOORS AND MANURE VAULTS.—Stable floors should be kept clean and occasionally washed with hot soapsuds or the hot strong soda solution. Powdered fresh chloride of lime may be used in manure vaults.

12. VACANT ROOMS should be frequently aired.

13. THE WOODWORK IN SCHOOL-HOUSES should be scrubbed weekly with hot soapsuds. This refers to floors, doors, door-handles, and all woodwork touched by the scholars' hands.

14. SPITTOONS IN ALL PUBLIC PLACES should be emptied daily and washed with the hot weak soda or soapsuds solution, after which a small quantity of the carbolic solution or milk of lime should be put in the vessel to receive the expectoration.

15. ELEVATED AND SURFACE CARS, FERRY-BOATS, AND PUBLIC CONVEYANCES.—The floors, door-handles, railings, and all parts touched by the hands of passengers should be washed frequently with the hot weak soda or in the soapsuds solution. Slat-mats from cars, etc., should be carefully cleaned by scrubbing with a stiff brush in the hot soapsuds solution.

USE OF BROMINE SOLUTION AS A DEODORANT.

SLAUGHTER-HOUSES, BUTCHERS' ICE-BOXES AND WAGONS, TRENCHES, EXCAVATIONS, STABLE FLOORS, MANURE VAULTS, DEAD ANIMALS, OFFAL, OFFAL DOCKS, etc., may be deodorized by a weak solution of bromine, which is a valuable agent for this purpose. The bromine solution, however, is only temporary in its action and must be used repeatedly. It should be applied by sprinkling. Although somewhat corrosive in its action on metals, it is otherwise harmless.*

* The solution of bromine must be prepared with great care, as the pure bromine from which it is made is dangerous. It is very caustic when brought in contact with the skin; it is volatile and its fumes are extremely irritating if inhaled. In preparing this solution in large quantities, a pound bottle of bromine should be dropped into a barrel containing forty or fifty gallons of water and then broken under water with an iron bar. The solution is completed by thoroughly stirring. To prepare a smaller quantity an ounce bottle of bromine may be dropped into a pail containing three or four gallons of water and broken in the same way and with the same care.

CONCLUSION.

The general principles of disinfection outlined in this circular may be applied for the disinfection of all articles not specifically treated of, and which are similar in character to those considered.

By order of the Board of Health.

MICHAEL C. MURPHY,
President.

C. GOLDERMAN,
Secretary *pro tem.*

[The Board of Health of New York City requires that all infectious and contagious cases shall be reported, and in the crowded districts these cases are to be visited, and a placard placed upon the door, warning visitors not to enter. After the disease is over the Health Officers come and fumigate if the family circumstances are such that they cannot do this themselves. They will also, on request, sterilize or destroy infected bedding. A list of the houses where contagious diseases are reported is prepared daily and sent to all schools, day nurseries, and similar places, or to any one wishing it. A leaflet is also printed in English, Italian, German, or Yiddish giving in very simple language careful information as to the cause and propagation of phthisis, with instructions for disinfection.]

MUNICIPAL DISINFECTION IN BERLIN

BY REBECCA SHATZ
Mt. Sinai Hospital Graduate

THE Berlin city ordinances compel disinfection of rooms after they have been occupied by persons suffering from Asiatic cholera, small-pox, diphtheria, typhus, and cerebro-spinal meningitis.

After typhoid, scarlet fever, epidemic dysentery, measles, whooping-cough, and pulmonary tuberculosis disinfection is always advised, but is only compulsory (ordered and supervised by the police department) in certain cases or under certain conditions.

The disinfecting plant occupies a large T-shaped building, so planned and divided that the infected articles are brought in at one court-yard and taken out through another, no disinfected article ever being carried through room or yard through which infected articles must pass. The city authorities send men to disinfect dwelling-rooms; they are fumigated with formalin and ammonia for three and a half hours. Pictures and furniture are washed off with five per cent. carbolic acid solution.

Bedding, clothing, and other movable effects are carried in large closed wagons to the disinfecting stations. In the receiving-room they are wrapped in sheets that have been wet with a five per cent. solution of carbolic, and are then carried to the next room, to be placed upon racks and shoved into the sterilizers. They are then received into a clean room, where they are stored for distribution.

Clothing and small articles are sterilized for ten minutes; feather beds and bedding, for thirty minutes; hair mattresses, thick, compact articles, brooms, and scrub-cloths, for one hour. A different relay of wagons carries the disinfected articles back to the owners on the same day they were removed.

The men who work in the receiving-room must first undress in a room set aside for that purpose and put on their working clothes—white cotton suits, canvas boots, caps for the head, and a moist sponge over the mouth.

When their work is done they undress again in another room and pass into a bath-room, where they take a spray bath, and then go into the room where the street clothes are put on. A laundry-room is provided, where the men wash their working clothes daily.

Men working in the infected parts are allowed no approach or intercourse with those working in the sterile portions of the building.

One room at the station is kept for testing the efficacy of chemicals. Streptococci are placed in drawers, on walls, and in crevices, and the effect of the various chemicals upon them is noted.

Midwives who are attending patients suffering with puerperal fever are compelled by law to come to the disinfecting station, take a bath, and have their clothes and instruments sterilized before attending other cases.

PRACTICAL POINTS ON PRIVATE NURSING

IN CHARGE OF
ISABEL McISAAC

HOUSEHOLD STERILIZATION

STERILIZATION is frequently written of as something very modern, but, granted that the word is new, the process is as old as the everlasting hills. Nature has not printed books upon the subject, but she has given clinical demonstration of its necessity ever since Eve suckled Cain and Abel.

Our grandmothers, and their grandmothers before them, did not call it sterilization, but when they established the weekly family wash they were practising what we are preaching about, and many of them might have given us practical points on the subject.

The usual method is that of putting the clothes to soak in cold water over night, the table linen being separated from wearing apparel. These are then washed through two warm soapsuds, boiled fifteen minutes in soapy water, rinsed twice in clear water, dried in the sun, and ironed with a hot iron. In small towns or the country this is almost perfect sterilization.

Likewise the semi-annual house-cleaning. When woodwork is scrubbed, wall-paper renewed, windows washed, carpets, rugs, furniture, and bedding beaten and put out into the sun, blankets washed, cellars, closets, and drains disinfected, we have every-day practical sterilization.

But sometimes when we are confronted with the necessity of perfect sterilization of surgical and obstetrical supplies our vision cannot go beyond nickel-plated steam sterilizers and the most expensive surgical dressings, and we do not realize that we can attain our object almost as perfectly, although with more trouble, by utilizing what the kindergartners call "home materials."

Beginning with sponges and dressings: nothing ever made is better for eye, mouth, and nipple sponges than old linen handkerchiefs cut into proper sizes; old napkins, table-cloths, and linen sheets and pillow-cases are admirable for larger sponges and dressings. If one can get butter-cloth and absorbent cotton, so much the better, but there is no excuse for infection because of the old linen.

The linen should be first properly washed by the process given, then

cut into the various sizes needed, sewed in small packages not too tightly packed, and labelled. Put these packages into an old pillow-case, again not too close together, because we will not have ten pounds of pressure; the open end of the pillow-case should be basted together, and one yard of a two-inch bandage pinned to each of its four corners. Give the family wash-boiler a thorough scrubbing with hot soapsuds, fill it half full of cold water, then suspend the pillow-cases on the under side of the boiler-cover by bringing the four ends of the bandage over the top and tying them to the handle. Fit the cover on as tight as possible and put upon the fire. It should boil one hour after the boiling-point is reached. The reason for beginning with cold water is that if the water is boiling and the cloths cold there will be so much condensation of steam that they will become very wet, which is much lessened by starting both at the same temperature. At the end of the hour put the pillow-case upon the grate of the kitchen oven and bake until it is quite dry and slightly browned. Do not open the pillow-case until needed and keep in a clean place. Several pillow-cases full may be done one after the other, to last several days if they are kept in a clean place and not opened until needed. A second baking may be given the small packages if they have to lie very long.

Towels, sheets, pillow-cases, bed-pads, confinement pads, nightgowns, and nightshirts (an excellent substitute for the doctors' surgical aprons) may all be prepared in the same way.

A new fifteen-cent dishpan makes a good pan for instruments, and even the old one may do duty if it is properly cleaned. The tall bedroom water-pitcher will hold the obstetric forceps after a preliminary boiling. An abdominal hysterectomy case has been known to make a perfect recovery when the instruments used at her operation had been boiled in the family potato-kettle.

The sterilization of milk or water is also a stumbling-block to many nurses and an unfathomable abyss to the average housewife.

The milkman comes in for such an amount of abuse that I often wonder no single voice has ever been raised in his behalf, not that he does not usually deserve it, and sometimes more, but there are instances when he is a long-suffering martyr to our neglect of common precaution. Wonderful tales are related of babies and adults snatched from the jaws of death by being carried to the cow to drink warm milk. One might infer from most of these tales that the recovery was due to the society of the milkman or the sight of the cow, but few ever mention that the credit is due to the sterile milk, which cannot become much contaminated from one receptacle, whereas if carried into the house and strained into cans or pans for distribution it goes into three or four dishes, not one of which is sterile.

The subject of kitchen sinks and dishcloths is one to which an investigating bacteriologist will turn some day and bring discredit upon the average kitchen by setting forth a list of microbes as long as the one in the medical dictionary. They do not realize the breadth of the field or they would have studied it long ago.

It is not only the baby but the adult who suffers from unclean cooking utensils, for there are many households whose tables present a good appearance whose pots, pans, and dishcloths would furnish abundant specimens for the microscopist. Drinking-water is surely familiar enough to all that we might realize the necessity for its purity, yet how often we know of families, nurses, and doctors (say it under your breath) who go on giving the typhoid patient the same drinking-water from which he got his primary infection, and this in the face of the fact that a teakettle and the kitchen fire, with twenty minutes' boiling, will provide him with sterile water.

Nurses might do much towards correcting many of these every-day abuses if they would apply the same principles which govern nickel-plated sterilizers, glass tables, and expensive water-filters to the ordinary household affairs and to surgical work done in the home.

If all the education our schools give goes no further than to leave the pupil under the impression that these scientific principles can be applied only by elaborate and expensive methods, then it is time we bestirred ourselves to disabuse their minds of anything so erroneous and pernicious.

SCARLET FEVER: ISOLATION AND DISINFECTION

By FRANCES E. MORLEY
Boston

To the nurse just starting out in private work, with hospital standards fresh in mind, the adaptation of strict rules to the new conditions is often perplexing.

How shall she observe all the regulations of asepsis in operative work, of isolation and disinfection in contagious cases?

The first requisite is to be thoroughly grounded in the hospital practice in such work. She should know how and why these things are done.

Her experience in asepsis should be such that every act becomes automatic, so that she could no more think of touching an instrument with unwashed hands than she would a hot stove with bare hand. But

this automatic work should never become so mechanical that she loses sight of the reason or the relative importance of her acts.

Then when she is placed in the new environment where something must be sacrificed she will know what is of vital importance and cannot be changed, and what is of minor value and may be dropped without danger.

Let us review the hospital rules now considered necessary in our best contagious hospitals in regard to the nurse's care of herself.

The rules usually enforced are:

The nurse shall wear, when on duty, over her regular hospital uniform a gown which is removed on leaving the ward.

Uniforms and street clothing shall never be brought in contact, but kept in separate closets.

A nurse must make a complete change of clothing before going on the street. If possible, she must take a full bath and wash her hair. If it is not convenient to wash the hair, it must be brushed in strong alcohol.

The shoes may be washed in disinfectant or changed.

Nurses are advised to keep away from children, and not to visit friends without first ascertaining whether their presence is desired. Knowing all these rules, their following her second nature, the nurse receives her call to go to a private house on a scarlet-fever case.

Her first thought is, "What shall I take?"

The fully equipped, carefully packed bag must be considered. Nothing should be carried into the infected house that cannot be thoroughly disinfected or that the nurse is unwilling to sacrifice if necessity requires.

She should run no risk by taking tools, however cherished, that cannot be boiled. Let the family supply syringes, hot water bags, etc.

The nurse's uniform should be one that can be boiled. As it is possible that a garment may be injured by the corrosive solution, economy suggests the sacrifice of an old gown.

Particular attention must be paid to slippers and night wrappers. Oftentimes these are worn as many hours and come as near the source of infection as the smooth surface of the dress that can be boiled. Take old ones that can be burned at the close of the case if necessary.

The nurse arrives at the house to find the patient in an ordinary room opening into a hall, one bath-room being used by all the family.

Just how can this room and surroundings be reduced to hospital rules? What must the nurse insist upon? What may she give up?

As to herself and her personal belongings, she must have a place entirely outside the sick-room to leave her street clothes and valise.

She must remember to take into the sick-room only such things as will be needed.

In the sick-room her own tact and skill must decide each case. Seconded by the doctor, she may, if the case has not progressed too far, have the room cleared of all but the bare necessities of a hospital room. She must use good judgment and act quickly.

Some families will act conscientiously and at the close of the case destroy all articles that cannot be thoroughly disinfected, others will, if not closely watched by the Board of Health, sell or give away articles they dare not use themselves.

It is possible that by removing a heavy curtain the first day of a scarlet-fever case and seeing that it is thoroughly aired, a nurse reduces the chance of infection from that particular article.

It may be wise to ask the family to give up the bath-room entirely. It may be advisable to remove the patient to a room that can be isolated and cleared.

All these points being decided, the nurse arranges, if possible, to have an anteroom, where she may receive her supplies, change her dress, etc. A sheet wet in disinfectant is hung before the door.

It is the nurses' duty to enforce strict quarantine upon all members of the family, reporting any infringement of rules to the physician.

In the sick-room the nurse observes hospital rules by having solution always at hand for the disinfection of every dish or utensil that passes out of the room, also for washing her own and the doctor's hands.

She should arrange, if possible, to have some means of burning refuse food, scraps of paper, etc.; also a way to heat water. Burned paper and boiled spoons are germ-free. If this cannot be done, every scrap must be wrapped in cloths wet in solution and at once burned.

The nurse on private duty must be even more careful than the hospital nurse in regard to sitting on the bed, caressing the patient.

Every article to be sent to the laundry must first be wrung from corrosive solution 1 to 1000 or placed in a bag wet in solution. It may then be safely carried to the laundry, where it receives the usual washing, including a long boiling. The nurse cannot go to the laundry herself, but she may impress the importance of the boiling upon those who do the work. Her own clothing must receive the same treatment.

All dusting and sweeping of the sick-room must be done according to hospital rules, dusters and brooms being wet in disinfectant.

The next question that arises is that of air and exercise for the nurse.

If there is someone who can come to the sick-room to relieve the nurse, there is no reason why she should not go out, and, in fact, she needs the air on a contagious case.

In preparing for her walk she must be very careful to thoroughly cleanse and disinfect her hands, and she must make an entire change of outer clothing, including shoes. In this cleansing remember that soap and water play an important part. It is easier to starve germs than to poison them.

The one inconsistency in this preparation must be the hair. One cannot wash her hair every day. She may keep it smooth and covered in the sick-room and apply strong alcohol on going out. Then let her exercise be in the open air, not a close street-car, where she is brought near children. The average passenger probably carries as many germs as a nurse fresh from a thorough disinfection, but the travelling public prefers the kind that lurks in soiled and unaired garments that has not been caught and named. A germ that allows itself to be imprisoned under a microscope and grown in a jelly dish is a fearsome beast, and one who holds dealings with such is to be shunned. If the nurse lives in an ordinary lodging-house, it will be as well for herself and the landlady to avoid her home while she is engaged in such uncanny work.

At the close of the case the nurse must leave her laundry to be done as it has been done through the case. She must burn any article that she is not sure may be disinfected. If her street clothing and valise have been kept strictly outside of the infected area, there is no reason why she should not take them home with her. If she remains after or during the fumigating of the rooms it would be as well, perhaps, to put even these within the magic circle. Then, having washed her hair and bathed in disinfectant, she may return to a boarding-house.

For a week, however, she should avoid close contact with children, for, notwithstanding all her care, there may be a slip somewhere, and it is within the bounds of possibility that she may herself be coming down with the disease.

If these simple rules are strictly followed by all nurses who take contagious cases, the danger to the boarding-house contingent from that source is reduced to the absurd. But let a nurse be careless in the smallest detail, so that a single case can be traced to her door, and the whole race of nurses will be shunned and turned from their lodgings. A delay of a few hours in washing the hair, the use of a cherished pair of slippers too lovely to be sacrificed, may carry a germ to some unsuspecting victim.

There are many more rules that could be given, but we believe that a few strictly observed will protect the public better than the knowledge of many not carried out.

EDUCATIONAL

IN CHARGE OF
ISABEL HAMPTON ROBB

DISINFECTION AND PROTECTION IN OUR SCHOOLS

By HELEN SCOTT HAY
Graduate of the Illinois Training-School for Nurses

ALL sanative measures in the schools of our country are questions that, strangely enough, have received little attention. A system fast approaching an unexcelled excellence and eagerly alert for whatever will add to its efficiency has yet passed by its opportunities—nay, its duties—in this regard; and the people, ignorant of their right of safety, have manifested only a quiet submission. The vigor of our school system is beyond question, and equally beyond disputation is the value of protective measures against disease. But that the public school powerfully illustrates the need and value of such measures, that between intellectual development and all that makes for physical perfection there should be a close relation and interaction, this few have realized or acted upon. There is, however, a growing agitation all over our country relative to school hygiene, and here and there one finds substantial beginnings in a scientific inspection, supervision, and instruction that are full of promise and encouragement. The few are thoroughly awakened, with all energies bent to the perfecting of a practical sanative system. It is the unthinking or unwilling majority who must now be won over to the endorsement of the work that the pioneers in the movement are establishing. Careful oversight in all serious transmissible diseases is regarded by everyone as a matter of course. But the constant vigilance and the use of preventive measures in times of apparent safety seem to many useless pother, and any complemental instruction but one of the fads decried as foolish and extravagant. The popular mind must be set to thinking; the need for health measures in the schools must be made clear and emphatic; the telling results already attained must be exploited, and plain methods advocated and put into practice as rapidly as may be. There will be a full awakening to the truth some day, and, meantime, everyone interested must do all he can by word or work to hasten that day's coming.

Disinfection, broadly speaking, is the cleansing from infection or

contagion. It may be, therefore, either by the removal of all source of infection or contagion, or by a process which shall render inert the existing germs of disease. Practically, both methods are but necessary steps in one complete process. When there appears in our schools any communicable disease, not only must the person suffering from that disease be removed from the schools, but the premises must be thoroughly cleansed and all belongings with which, in his diseased condition, he has come in contact must be purified or destroyed. More than this, not only with the appearance or suspicion of disease, but at all times, there must be an intelligent supervision of all sanitary conditions. Certainly all this sounds neither new nor unreasonable, and yet it is just in the carrying out of such a process that the advocates of a careful school sanative system find disheartening apathy or opposition; and the school, college, or academy where disinfection theoretically or practically has a regular place is still undiscovered. Yet who can doubt the need? Fourteen millions of school-children in our country, an average of fifty to sixty in a room, representative of every grade in the social scale and of homes of every degree of unwholesomeness. All these children, their mental powers actively alert, moving, working side by side, in constant contact for from three to six hours of each school-day, handling the same books and apparatus, perhaps using the same towel and tincup. Surely the safety of the whole demands that the schools shall furnish to each individual the same adequate protection he would get in the most carefully guarded home.

Foremost among the auspicious signs is the plan of medical inspection, now recognized as a vigorous branch in the school systems of many of our cities. Of these systems none has done more efficient work or shown more gratifying results than has that of the city of Chicago. It was only in January, 1900, that medical inspection was begun in that city with the appointment of fifty medical inspectors of schools to work under the technical direction of the city Department of Health. These inspectors, all physicians, appointed after rigid competitive examinations, have each apportioned to them a number of schools which they are required to visit daily, examining all pupils referred to them by the school principals as giving evidence of a transmissible disease or who have been absent for four or more consecutive days. Examinations are made for the following diseases: scarlet fever, diphtheria, measles, rötheln, small-pox, whooping-cough, mumps, chicken-pox, tonsillitis, pediculosis, ringworm, or other transmissible diseases of the skin or scalp, and transmissible diseases of the eye. If any of these disorders are found to exist, the child is sent home with a card explaining to the parents the cause of the exclusion. In cases of pediculosis, and these

only, is treatment suggested. All examinations are made as unobtrusively as possible and strict asepsis is observed. For throat examinations wooden tongue depressors are used, one for each person, and then burned. In emergencies, small-pox and the like, emergency inspectors are at once sent out from the central office, who make more detailed examinations, see to the isolation of the child suffering from the disease, to the dismissal of the school, and to the thorough disinfection of the premises. With the resuming of school they also watch carefully among the pupils for any suspicious symptoms, especially in those thought to have been exposed to the disease.

Duration of exclusion in *scarlet fever* is till desquamation has ceased; in *diphtheria,* till throat-culture shows the absence of the Krebs-Löffler bacilli. In *tonsillitis,* a child is excluded on clinical evidence alone, and throat cultures made for further diagnosis.

Reports on the work accomplished by this medical inspection show how immeasurably greater is the safety given by this method to the children of our schools. Referring again to the system in Chicago, we find that from January, 1900, to May of the same year the total number of examinations made was seventy-six thousand eight hundred and five. In four thousand five hundred and thirty-nine cases contagious diseases were detected and excluded.* And this in only four months. The value of this daily inspection is not merely in the detection of the disease, but in the detection of it at such an early stage that the dangers of conveying it to others are reduced to a minimum. And this early detection is found not only to reduce materially the number of sporadic cases, but also, in a large degree, to prevent epidemics among the school-children. But more than detection and exclusion is necessary to the complete protection of health. Recognizing this fact, departments of school sanitation are working to bring all questions of ventilation, plumbing, lighting, and proper care of the school-rooms for final reference to those who will give to them the most scientific study and careful oversight.

That disinfection in the schools, however, may be brought about by methods other than that of medical inspection is shown by the work of the Board of Health of the State of Michigan—a work that gets down to the very heart of the difficulty, instruction of the masses. In the statutes of the State we find this gratifying requirement: "There shall be taught in every year in every public school in Michigan the principal modes by which each of the dangerous communicable diseases is spread, and the best method for the restriction and the prevention of each such disease. The State Board of Health shall annually send to the public-

* "Report of Department of Medical Inspection, Chicago Board of Education, 1900."

school superintendents and teachers throughout this State printed data and statements which shall enable them to comply with this act. School Boards are hereby required to direct such superintendents and teachers to give oral and blackboard instruction, using the data and statements supplied by the State Board of Health."* And it is equally gratifying to notice the hearty recognition and encouragement that this law is receiving. To facilitate this work, monthly bulletins on all manner of hygienic subjects are issued to teachers. Among them we notice "Hygiene of the Eyes," "Michigan Water Supplies," "Bacteriology in its Relation to Public Health," "Restriction of Tuberculosis," and "Discussion of Dangerous Communicable Diseases." Not only are these means employed in the schools to educate against the indifference of the people, and up to a proper appreciation of the laws of health and sanitation, but bulletins containing valuable information relative to the various communicable diseases are to be had by everyone for the asking. Here we find treated: "Restriction and Prevention of Whooping-Cough," "Scarlet Fever," "Small-Pox," "Diphtheria," "Meningitis," "Tuberculosis," "Measles," and "Typhoid Fever." In these papers are set forth the duties of health officers and of those caring for the sick; the need of isolation is emphasized; means and methods of disinfection are explained, and directions given for the care of the convalescent and the burial of the dead. These documents the local health officers are urged to circulate freely wherever there is an outbreak of any of these diseases. What an education this makes possible for the masses! Can anyone adequately estimate the help accomplished for a school or community by these remedial methods that strike at the very source of the disorder? Begun in the schools and supplemented by the intelligent instruction of all classes, they become a tremendous power in the safety of the State.

Medical inspection and supervision of our schools, accompanied by wise instruction—will not this union give us a system perfect in its results and practical in all its methods? Ought this not be the end towards which all efforts should be directed? Is rigid examination of the mind's capabilities justified, with a total neglect of the condition of the body, or instruction for mental development in every subject, from stringing beads to studying French verse forms, to be found a place for and no provision be made for teaching the simple lessons of how disease and even death may be averted? City schools are giving health-lessons some attention; but to arouse a new enthusiasm, and for the sake of smaller communities where even a lessened need does not justify the total indifference, State Boards of Health will need to see that the necessary

* Section 4796, "Compiled Laws," 1897; Section 23, "Public Health Laws," 1899.

data are furnished, and that the necessary laws are enforced or enacted for regular and suitable instruction.

In the meantime, while these bodies are setting to work, much can still be done to promote the health of school-children. The oversight of this humane task will largely devolve upon the teacher. To be sure, her powers are limited and her duties legion, but no teacher can do the best for her pupils and be ignorant or unmindful of the care and needs of their physical natures. The ignorance of many of our best teachers on all questions influencing health is lamentable. Not only should more in this regard be exacted of teachers by the School Boards, but each teacher should exact more of herself. She should familiarize herself with the laws of health, with the value of the natural disinfectants, air, light, and sun, and the principles of ventilation and of plumbing. She must insist upon a scrupulous cleanliness of the room and of each pupil; lavatories should be made attractive, with plenty of soap and hot and cold water, and enough clean towel space provided for every face and pair of hands; every child should have his own drinking-cup,—and this should be kept clean; the habit of putting pencils to the mouth should be discouraged from the first grades, as also the passing about of whistles, etc.; school-rooms should have thorough scrubbings at least once a month; walls should be carefully swept down, and all dusting done with a damp cloth; at least once a week balustrades, tables, blocks, and all apparatus in general use should be washed with some disinfectant, such as a weak formalin solution; close watch should be kept for skin disorders or diseases of the eyes which are transmissible, as well as for any acute communicable disease, and a physician should be called in or the child sent home at the first intimation of danger; if any child has gone home sick, suspicion pointing to a contagious disease, then the child's seat and desk should at once, pending the diagnosis, be carefully disinfected; provision should be made in the school curriculum for daily lessons on all questions of health. In the higher grades interest will be increased by the study of pathogenic cultures and by microscopic work. If the teacher is not equal to this, there will nearly always be found in any community some physician who will willingly give of his time and research.

Another broad field of opportunity open to the teacher is that of instituting mothers' meetings, where there will be friendly and informal discussions on the questions of food, clothing, ventilation, physical defects, etc., and much kindly, helpful advice given. Some of these innovations may be long in being introduced, and School Boards will be found still clinging to the customs that they by a kind providence have survived. But let a start be made in the right direction. More

often, instead of discouragement, there will be found a pleasing receptivity and a quick adaptation to the new order of things.

Down in a vacation school in the Ghetto district of one of our large cities there are some earnest kindergartners who are busy for no small part of their midsummer term with baths, house-cleaning, and a public agitation generally. It is the old story, of "poverty, rags, and dirt;" but soon lines of demarcation recede and disappear, tumbled locks become untangled, and a clean, white kerchief about the neck or a quaint little apron show the leavening process that is silently at work. From such small beginnings arise great results, and from the teachers is coming the greatest security of health—teachers not only from our public schools, teachers also of morals, of true religion, of all that makes people lead better, more wholesome lives. State Boards of Health and city systems will look to the needs and outline the policy and the work that they have begun; the people, taught by good teachers the value and protection of life and health, will carry it to a successful and perfect completion.

[Miss Hay writes from the stand-point of practical experience, from that of a teacher for some time in a high school, and from that of a trained nurse. It is to be hoped that her very interesting and practical paper may be widely read, and that it may by some means reach the hands of many teachers. It is a further plea for preventive medicine, in the agitation for the use of which the trained nurse should take an active part, and in this connection the thought arises that until such times as teachers do become better acquainted with the laws of health and their application to the needs of school-children, and with the methods for preventing disease, might not the trained nurse's knowledge be made use of by having her on Boards of Education and by having her give courses of instruction at mothers' meetings on food, clothing, ventilation, etc.? In England some advance has been made in these directions, of which mention has already been made in the pages of this Journal.—Ed.]

PROPHYLACTICS

IN CHARGE OF

MARY M. RIDDLE

THE DISINFECTION OF SICK-ROOMS AND THEIR CONTENTS

We are told that "micro-organisms may be killed by heat or by the action of chemicals, the processes being generically termed sterilization. The term sterilization is usually employed to denote the destruction of bacteria by heat, in contradistinction to disinfection, which means the destruction of bacteria by the use of chemical agents. A chemical agent causing the death of bacteria is called a *germicide*. An object which is entirely free from bacteria and their spores is *sterile*. Certain substances whose action is detrimental to the vitality of bacteria and prevents their growth amid otherwise suitable surroundings are termed antiseptics."

We know little about the history of the germs with which we are so intimately associated. We have no conception of the long, weary years, full of unceasing toil, spent by the bacteriologists in their laboratories. We may be interested, and an account of the results may sound almost like a fairy tale, but we are wofully ignorant of the things themselves, as well as of the significance of the terms used and their relations to one another. Neither are all nurses able to prepare articles for sterilization, nor are all able to manage a steam sterilizer.

How many know the meaning of the expression "steam under pressure," or the degree of heat used for sterilization, or the length of time required for it, or the class of articles admitting of sterilization by heat, or many more facts that apply to the practical work of disinfection and sterilization.

The study of antisepsis, sterilization, and disinfection naturally leads us to consider the disinfection of sick-rooms and their contents as well as the dejecta and discharges of patients suffering from contagious and infectious diseases. One of the most approved methods of disinfecting the contents of sick-rooms is that of sterilization by steam, which consists in exposing articles to steam under pressure. The terms steam under pressure and super-heated steam are synonymous. It is by the continuance of pressure that we get the heat; this pressure, to be

most effective, should be fifteen pounds to the square inch, which means a temperature of 250° F.

It is the action of the heat that destroys the germs, but the advantages of steam over dry heat are twofold. First, the articles are not charred, and, second, the penetrating power of steam makes its action more effective. This method is especially useful for carpets, beds, mattresses, blankets, and certain articles that cannot readily be disinfected in any other way; articles to be subjected to sterilization by steam ought not to be folded.

An ideal steam sterilizer for such purposes consists of a huge iron cylinder having at either end a door of the size of the cylinder end and having within the cylinder upon the floor two steam coils,—a coil of closed pipe and one of perforated pipe. The articles to be sterilized are placed upon the racks or hooks within the cylinder, the doors are closed, and the steam turned on in the closed coil, which causes the temperature of all within the cylinder to rise. When the temperature has reached 110° F. the steam is turned on in the perforated coil and continued under pressure until it has reached fifteen pounds to the square inch, where it is maintained for one hour. At the end of this time the steam is turned off from the perforated coil; the exhaust-valve is opened, by means of which the steam escapes from the interior of the cylinder, and a second valve is also opened to allow a free circulation of air within the cylinder, which should, by this process, be cleared of steam within five minutes, when the door may be opened and all the articles be considered sterile and safe to handle.

The object of heating the cylinder by means of closed pipe is at once seen to be that of preventing the condensation of steam within the cold cylinder and the ruin of the articles to be sterilized.

The following articles are ruined by sterilization with heat: boots, shoes, rubbers, kid gloves, furs, buttons of horn, articles of skins, fur-trimmed garments, feather-trimmed garments, velvets, plush, etc. A mattress tufted with leather buttons should have them removed before sterilization.

There are other means of disinfecting the above-named articles, as with chlorine gas, the fumes of sulphur, and the fumes of formalin; the latter is at present generally practised. Formalin is a forty per cent. solution of pure formaldehyde gas in water, to be further diluted with water for the purpose for which it is required. It is a powerful disinfectant for rooms, furniture, clothes, and the person. It is said to have the same germicidal power as corrosive sublimate without its toxicity.

It is made in various ways chemically, and is also said to occur in those plant-cells which contain the green coloring matter, and is thought

to be an intermediate product in that wonderful process known as the formation of starch and sugars from the elements which the plant absorbs from the air. It is also formed by passing the vapor of methyl alcohol (wood spirit) over glowing coke; by this means the alcohol is oxidized, chiefly to formaldehyde.

"The destructive action of formalin on micro-organisms depends upon a number of factors,—the chief of which are its concentration in the surrounding atmosphere, the length of the contact, the existing temperature, the accompanying moisture, and the nature of the organism."

"The necessary concentration of the gas in the surrounding atmosphere to kill the micro-organisms varies with each species, for some resist chemical agents much more than others, and also with the freedom of access of the gas to the bacteria," for if they are under cover or within fabrics, a greater amount of gas must be generated than if they are freely exposed. It was formerly considered that the destruction of bacteria was accomplished only in a dry atmosphere, but further and more recent investigations have proved that a moist atmosphere, even to saturation, aids very materially in the process; therefore if steam may be permitted to escape or be generated in the room in which fumigation by formalin is to take place, the success of the process will be more assured. A fairly high temperature also increases the penetrative power of the fumes as well as their activity: 110° F. represents a degree of heat which aids greatly in rendering the fumigation effective and yet is not high enough to injure the fabrics to be disinfected.

The length of time required for contact with the fumes varies greatly with the kind of bacteria to be killed and depends upon the conditions just mentioned, viz., the concentration of the gas, its access to the bacteria, moisture, and temperature. Even a thin covering renders futile the attempt at disinfection by formalin. An experiment was tried with two handkerchiefs that were saturated with discharges from the nose and throat of patients suffering with diphtheria. One of these handkerchiefs was exposed directly to the fumes of formalin and the other thrust lightly into the pocket of an old coat hanging in the room to be fumigated. This experiment was tried repeatedly, and always with the same result: cultures from the handkerchief in the pocket always grew the bacilli of diphtheria, while the one exposed directly to the fumes produced no cultures that would grow. From this we learned that formalin is a good surface disinfectant and that it must have free access to the bacteria.

The heavier the articles to be sterilized, the greater the amount of formalin required,—our text-books say this amount should vary from one fluid ounce to thirty fluid ounces.

The following rules have been used for sterilization by formalin and have been found effective and practical:

First.—Seal the room and, if possible, allow the escape of steam therein.

Second.—Arrange lamp, which may be a simple alcohol lamp carefully placed in an iron pan or on a piece of marble on the floor in the centre of the room.

Third.—Arrange vessel to contain formalin, which may be an open basin or tincup placed directly over the alcohol lamp.

Fourth.—Use of solution formalin forty per cent., between two and three fluid ounces in vessel.

Fifth.—Use of alcohol two fluid ounces in lamp to generate fumes.

Sixth.—Light the lamp, leave the room, and seal the door.

This is for a space represented by one thousand cubic feet, and the required time of exposure is from five to eight hours. If formalin pastilles are used, fifteen grains per thirty-five cubic feet are required. All articles not sterilized by steam should be subjected to this process, as well as all bed and body linen, before being sent to the laundry.

This amount of formalin is said to destroy such bacilli as those of typhus, diphtheria, and the ordinary infectious diseases. The apparatus formerly used was a complicated one, but this simple one is quite as effective. Every precaution against fire must be taken, as the alcohol lamp is left burning where no one can watch it.

It is not possible to sterilize or disinfect the air of a sick-room during its occupancy by a patient. Since the disinfecting capacity of solutions depends much upon their concentration, it is foolish to place saucers containing these solutions beneath the bed or in different corners of the room. They can do no good, and may do harm by obscuring foul odors (which should be considered danger signals) arising from material that ought to be removed from the room by the possibly more disagreeable odors of the disinfectant.

"During the period of illness a room in which a patient is confined should be freely ventilated, so that its atmosphere is constantly changing and replacing the closeness so universally prevalent during a course of fever by fresh, pure air,—a comfort to the patient and a protection to the doctor and nurse."

How this is to be done depends largely upon the ingenuity of the nurse. Many sick people are afraid of fresh air and have to be urged to take it, but much can be done towards convincing them by always speaking of it as clean air. This term will often appeal to the patient when that of fresh air fails utterly. Again, many fear the inflow of clean air during the night, on the ground that it is night air. This prejudice may

be reasoned down by saying that if the patient breathes at all after dark he must breathe night air. Night air is not so life-giving as day air, because it has not been vitalized by sunshine, but it is infinitely more useful than that contained in the sick-room and which has been breathed over and over again. The good thus done in struggling to keep the air pure may be counterbalanced by keeping a gas-jet burning in full force. This uses up the oxygen of the air that rightly belongs to the patient, besides leaving impurities behind it.

The disinfection of excreta demands prompt and unwearying attention. In diphtheria the vomitus, expectoration, and nasal discharge are most important. The last two should be received in old rags or paper, such as paper napkins, and should be at once destroyed by fire. Towels or handkerchiefs ought never to be used for the reception of these discharges lest the contagion be spread. The very towels or handkerchiefs so used may soon be used again about the eyes of the patient; and having these articles washed causes, also, an unnecessary exposure of the laundress.

The sputum of tuberculous patients should be received in glazed earthen vessels that can be boiled or sterilized, or in paper napkins, which can at once be burned. These napkins are not quite as good as the small pasteboard boxes used by some hospitals. It would be well if tuberculous patients could have towels, knives, forks, spoons, plates, etc., kept strictly apart from the others of the household and frequently boiled for considerable lengths of time.

Tuberculous patients should be compelled to use the sputum cups. Even if it is intended to burn all such discharges they should not be allowed to become dry and float about in the air to be inhaled and infect new victims, and they will not if deposited in the cup in a solution of chloride of lime.

Dust from the walls, mouldings, pictures, etc., in rooms that have been occupied by consumptive patients, where the rules of cleanliness have not been carried out, contain the germs and are said to produce tuberculosis in animals when used for their inoculation; therefore such rooms are unsafe for human occupancy and should be thoroughly disinfected and cleaned before they are again occupied. If the sputum of all consumptive patients were destroyed at once when discharged, a large proportion of the cases of the disease would be prevented and the disease itself would be in time wiped out; but the spectacle too often presented in our streets and at our own doors impresses one with the idea that it is a mammoth undertaking, this, of so educating the public that individuals will realize that they have no right to expectorate in the street or in any other place where the sputum may become dry and mix

with other dust, to be blown about till it finds lodgement, probably, in the respiratory tract of some innocent victim.

The excreta from typhoid-fever patients require particular attention; these, and, indeed, all matter possibly the source of infection or contagion, should be received in glazed earthen vessels and immediately thoroughly mixed with a five per cent. solution of chlorinated lime if semi-solid or with the powder if liquid, and allowed to stand for an hour before being thrown into the drain. Chloride of lime is one of the most valuable disinfectants; it is cheap and can be used either in the dry powder or in a solution. If kept in the powder form, care must be taken to keep it dry and in an air-tight receptacle.

Dry freshly slaked lime is also a good disinfectant, or milk of lime which is made by dissolving one pound of the dry freshly slaked lime in four or five quarts of water. Lime is slaked by pouring a little water on a lump of quick-lime; the lime becomes hot and crumbles to a white powder. Air-slaked lime has no value as a disinfectant.

Cleanliness and disinfection are so closely allied that one can hardly be mentioned without the other. Any patient's chances of recovery are lessened in proportion as there is failure in this respect; it all involves painstaking care, but the results more than repay the efforts if no new cases develop in the train of the preceding.

A successful surgeon was heard to say that he insisted upon perfect asepsis in his work; that nothing less was sufficient; that, at the close of every operation, while all is fresh in the minds of operator and assistants, he has a written report of just what was done—every step of the operation is recorded and by whom such steps are taken. This is done in order to know just where to fix the blame if all is not well as a result of the technique of that operation.

It may some day be just as possible to tell who is at fault when one of the communicable diseases is transmitted. If it is ever brought about, it will doubtless be due to the efforts of the bacteriologists.

Considering the progress that has been made in the knowledge of the germ theory and its relation to disease, would it be at all strange if ere long we shall have to furnish affidavit to Boards of Health in our cities of our work done in the care of such diseases as these we have been considering?

It may not foster the highest motive to encourage the performance of duty because a law provides for punishment in case of failure,—it is much better to do right for the sake of right,—but since "it is a common principle in ethics that laws are only for law-breakers, they being the only people cognizant of their existence," the law-abiding have nothing to fear.

CHILDREN'S DEPARTMENT

IN CHARGE OF
LOUISE C. BRENT

DISINFECTION OF A CHILD'S BODY

THE care of a child suffering from an infectious disease is important to the nurse in that, as well as nursing the patient, she must guard against the spread of the disease.

The cause for precaution is not over even when the attending physician has pronounced the patient well, or in a case of diphtheria when a microscopic examination shows that the swab is free from the germ, and is not until the child and everything in connection with it has been thoroughly disinfected.

It is needless to say that during the disease the patient should be bathed freely, and yet some imagine the danger of taking cold so great that they sacrifice cleanliness. This must not be; the child should be kept clean; then when the time for disinfection comes, her labor is comparatively a light one.

If the disease is one where desquamation occurs, it is well to vaseline the patient every evening, as it assists in loosening the dead skin.

The patient is now ready to be disinfected:

First wash the head with warm water and castile soap; having thoroughly freed the hair from soap, rinse with a disinfectant solution, carbolic one part to forty parts water. Then rub the scalp well with a solution of alcohol and water, as this prevents the liability to cold. Now wrap the head in a towel wrung out of the carbolic solution and proceed with the disinfection. Put the child in a warm bath, being sure to see that all the dead skin has been removed, especially from under the nails. Wrap the child in a clean blanket and sponge well with the carbolic solution, being careful to avoid mucous surfaces. Have at hand a sheet which has been wrung out of the disinfectant solution, and then roll the patient in it covered with a warm blanket. Spray the nose and throat with some mild solution. The patient may then be transferred to a clean room entirely free from the danger of infecting other children.

THE FEEDING OF CHILDREN

By JOSEPH ROBY, A.M., M.D.
Rochester, New York

(Continued)

It is during the latter part of the period covered by the previous paper and the first part of this—namely, from three to six years of age—that many children begin their education at the kindergarten, and for this reason the food is still an important consideration in the child's life, for it is just at this time that the child's nervous system is developing.

There is no one food that is peculiarly a brain food, but, as was stated in the first paper, a child needs a generous, varied, and mixed diet. He needs plenty of albuminous material in the shape of eggs, meat, milk, or fish to form the tissues of his rapidly growing body and brain. He needs fat in the shape of cream, milk, butter, olive oil, cocoa, and cornmeal to act as fuel for the body during its increased activity, and in winter he needs proportionately more fat or fuel in order to make up for the increased loss of heat. He needs carbohydrates in the form of vegetables and cereals to act as fuel, furnish the necessary mineral salts, and act as laxatives. He needs green vegetables and fruits to act as laxatives and furnish the unknown something that prevents scurvy and malnutrition.

About the most important chemical constituent of the brain is lecithin, a body found especially in the nervous system and also in the yolk of eggs, peas, beans, and rapidly growing vegetables. But it is very improbable that these foods have any particular power to nourish the brain on this account, although they are all good foods.

A child should not try to study or do much work on an empty stomach. If it is impossible to get breakfast ready for an ambitious child who wants to study early in the morning, a glass of warm milk and piece of toast or cracker may be supplied before the regular breakfast. The child should be made to get up early enough so that it is not necessary to gulp the food down in order to get to school on time. It is well to start in early in the child's life to train it to have a regular time for the daily movement of the bowels. An infant under one year of age can often be taught to do this. The best time for this is right after breakfast, and this time should be chosen and strictly adhered to. It allows some time for the food to be digested in an older child before

starting for school, and if it was insisted upon by parents, would save much trouble in after life.

A healthy child should have a good breakfast. It is very well for those who have nothing to do but lie in bed until noon to go without breakfast, but a healthy, active boy cannot throw snowballs or jump hitching-posts on the way to school with an empty stomach, when his heart alone has done enough work during the night to correspond to a fairly good run, and then be expected to do three or four hours' hard work in school.

The hours for meals should be regular, but if a child persistently gets hungry between meals, and there is quite a long interval from breakfast to lunch or dinner, it is better to give a glass of milk and a cracker rather than to let the child take nibbles right up to lunch-time, and then have absolutely no appetite. A child does not eat as much as an adult, and the stomach is empty rather sooner than the usual four to five hours, and there is, consequently, need of food oftener.

Supposing a child gets to school at nine A.M., the breakfast should be early enough for the meal to be eaten slowly, say seven-thirty to seven-forty-five A.M.

Then the child may have a light lunch in school at eleven A.M. This may be omitted in children over ten to twelve years old. Dinner will be at one-thirty and supper at six to six-thirty, and the menu taken from the following list:

Breakfast.—Fruits: oranges, apples without skins or cores, pears, baked apples, peaches, prunes, figs, hot-house grapes with seeds removed, common grapes in older children, and strawberries with care. Cereals: oatmeal, cornmeal, hominy, rice, wheatlet, wheatena, cracked wheat, changed from time to time, with sugar and cream. Eggs, chops, steak, fish, bacon, well-made corn-beef hash, creamed potatoes, toast, dried bread and butter, brownbread, milk, cocoa, chocolate, water.

Morning Lunch.—Glass of milk, crackers, bread and butter, cold roast beef, lamb, chicken, or turkey sandwich.

Dinner.—Clear soup, beef, mutton, chicken, or turkey broth, purée of peas. Meat: roast lamb or mutton, roast beef, beefsteak, lamb chop, mutton chop, chicken, turkey, squab, game for older children, sweetbreads. Oysters. Fish. Vegetables: baked, mashed, or stewed potatoes, spinach, spaghetti with tomato sauce, stewed celery, cauliflower, asparagus, peas, beans, onions, carrots, turnips. Dessert: junket, custard, rice-pudding, jellies, ice-cream.

Supper.—Bread and milk, milk-toast, cereals, stewed prunes, marmalade, bread and butter or bread and butter and sugar, cornmeal mush with molasses or syrup.

Children up to six to seven years old should not eat ham, sausage, pork, kidneys, liver, pastries, griddle-cakes, fresh bread, hot biscuit, preserves, tea, coffee.

No definite rules can be set down for every child as to the time for meals, the number of meals, and the amount to be eaten at one time. The best guides to the child's condition are the same as in infancy, the weight and color of the lips.

The time for meals will vary with the child, the hours at school, the distance from school, and the family domestic arrangements. There is only one point I wish to mention in this connection, and that is the time for giving the heaviest meal. Shall it be at noon or at night? The following authors have been freely consulted in preparing this article: Jacobi, Holt, Griffith, Thompson, and Hogan. I cannot find that any differ on this point. It seems to be the general advice to give the heavy meal at noon, and yet there seems to be reasons why this should not be done. The question will usually be settled in any particular family by the habits of the parents; if it is the custom to have late dinners, the child will have late dinners.

The reasons why a late dinner seems advisable are: First, if the supper (and a light one at that) comes at six P.M. and breakfast at eight A.M., it means that the child will go thirteen to fourteen hours without food. Many children will become hungry during the night by this method. Second, if the heavy meal comes at noon, it means that the child has either to study or play when the stomach is taxed to its utmost capacity and when it needs all the blood at its command, and really cannot or should not spare the blood necessary for active mental or physical work. It is a well-observed physiological fact in animals as well as in man that there is a tendency to sleep after a full meal.

Such an observation is not to be neglected. It is true that children can get up from the dinner-table and play as hard as ever, often with impunity. But often it disagrees with them. Now it seems as if the proper time for the heavy meal is after the day's work has been done, when the body and mind can be at rest. By this means also a longer time is given for the digestion of the heaviest meal, the one necessitating a longer time, before food is again taken into the stomach. At any rate, it is well for young children to take their daily nap after the heavy noonday meal.

(To be continued.)

PROGRESSIVE MOVEMENTS

IN CHARGE OF
LUCY L. DROWN

THE KINDERGARTEN HOUR

By MARY ISABEL HAMILTON

To the outsider, the name "Surgical Ward" would hardly suggest at any time the possibility of an atmosphere of happiness, more particularly when the ward is filled with small children. Yet one has only to peep into Ward O, in the City Hospital of Boston, any afternoon between three and four o'clock to see the delight expressed in the countenance of each little sufferer, for it is Kindergarten time, and that means an occupation of some sort, varied for each day. First comes a story, which, when completed, is generally followed by "Oh, please, now, do tell us another;" then a song or two suitable to the season, the children enjoying very much the ones about Santa Claus, Jack Frost, and never tiring of Miss Poulsson's finger-play game of

> "Here's a ball for baby,
> Big and soft and round."

After the singing comes our work, which consists of sewing of cards in bright-colored worsted; sometimes the design is outlined, and, again, the children invent their own patterns; the weaving of mats, through which the children learn color, number, and form; the folding of paper into life and geometrical forms; the painting of fruits, varied by the children's own creations, formed by combinations of geometrical figures drawn by children and then painted; drawing, peas-work, and cutting. In all of these occupations the child is at times given free scope to use his own ideas, while at others he is told what to do. Each child's work when completed is marked with his own name and saved, so that when he goes home he takes his finished work with him. For the tiny tots not able to handle this material there are beads of all colors to string, which gives them much pleasure; also square boards are supplied filled with holes, into which the child puts brightly colored pegs. All this diversion takes the child's mind from himself, furnishes employment for

the restless little fingers, and gives him something pleasant to look forward to.

It is indeed a great satisfaction for one in the work to feel upon the arrival of the elevator that all the children able to be about, either on crutches or in wheel-chairs, will be waiting for the teacher, and as she steps forth she is greeted with sparkling eyes and a slap of the hands, thus: "Oh, here you are!" "What are we going to do to-day?" "Sewing?" "Oh, I just *love* sewing. I wish the bell would ring for the visitors to go, so we could begin." One day little M., suffering with a broken leg, said, "Please let us go right to work, for I'm going to have my dressing done, and I'm afraid if you don't hurry up the doctor will be here, and then I can't do my Kindergarten work." As she finished speaking, the doctor made his appearance. The child's face fell. I quickly prepared a sewing-card and gave it to her. She was wheeled away to the next room, from which issued not a sound. After a time she returned jubilant and remarked, "You didn't hear me scream, did you? I just worked all the time on my card, and the doctor said it was better than chloroform for me." Nothing seems too hard or troublesome for them, and they work with a will. Generally it is said, "May I do another when I finish this?" One day when this request was made I said, "Time is up, and I must be going." "Oh, dear, it just seems like five minutes since you came." "Yes," I said, "doesn't the time fly?" to which remark a small voice piped up from the bed in the corner and said, "It does when we do Kindergarten work, but if you had to lie here all day doing nothing you'd think it was awful long."

What is done in the hospital can hardly be termed "Kindergarten work," as it is simply an adaptation of some of the Kindergarten occupations to meet the needs and requirements of the children. Of course, very little development can be noticed, as the children remain so short a time except in some few instances.

Too much cannot be said in praise of the one who originated this hour of recreation for the little ones, for it is indeed a great work, and our hope is that it may always continue.

NEW DRUGS

IN CHARGE OF

WILLIAM SCHLEIF, M.D.

Instructor in Pharmacy, University of Pennsylvania

DRUGS: THEIR USE AND ABUSE.

DRUGS are substances used in the treatment of disease. The study of drugs is termed Materia Medica. In a general sense it includes everything which is known about these agents, whether they be natural or artificial, of vegetable, animal, or mineral origin.

PHARMACY deals with the various methods of preparing drugs to present them in a form suitable for administration.

THERAPEUTICS refers to the physiological action of remedies; to the effect produced on the constitution as well in health as in disease, and includes an experimental study of their action on the lower animals.

TOXICOLOGY is a study of poisons.

PHARMACOLOGY is a more general term; it embraces all the subjects relating to the study of remedies, Materia Medica, Pharmacy, and Therapeutics.

Various classifications are adopted to simplify the difficult study of Materia Medica. The drugs may be arranged according to their physical characteristics and source, the natural subdivisions of vegetable, animal, and mineral drugs resulting. Of these classes the vegetable and mineral claim the largest number, as relatively few drugs of animal origin are in use; nevertheless, the latter are of very great importance. The vegetable drugs, for convenience of study and for purposes of exact identification, are further subdivided into groups according to their botanical characteristics; thus we have natural orders, then genera, and finally species.

The animal drugs are grouped as to origin into classes and orders. This form of classification does well enough for the identification of the drug by the pharmacist, botanist, or zoölogist; but the practising physician or toxicologist is interested solely in the effect of the drug on the human organism, chiefly as a remedy in the treatment of disease. Therefore he chooses a classification as to therapeutic or physiologic effect and divides all drugs into groups like the somnifacients, excito-motors, cardiac stimulants, etc.

For the purpose of administration, medicinal substances may be divided into gases, liquids, and solids. *Gases* form a small and unimportant class. They are readily given by inhalation, enter the blood quickly by reason of the large area exposed in the capillaries of the lungs, and act more promptly than do either liquids or solids. Elimination also is rapid. Rarely they have been introduced into the rectum for medicinal effect; occasionally they are administered dissolved in liquids by way of the stomach. A certain number of very volatile liquids given by inhalation—ether, chloroform, amyl nitrite—more properly belong to the class of gases.

Liquids.—The largest number of drugs are administered in the form of liquids. The amount of medicinal action obtained from any drug—provided it is not used solely for its local effect—depends upon the more or less complete manner in which it is absorbed; the rapidity with which this is effected; to a less extent, upon the rate with which it is eliminated. Absorption and elimination usually bear a definite ratio to each other, so that a substance which enters the circulation quickly will leave the system in a comparatively short period of time. The largest number of both liquids and solids—and they form practically the entire list of drugs—admit of but one route of introduction, that of the stomach. It is perfectly evident that all solids must first become liquid before they can be absorbed by the stomach and intestine so as to produce a constitutional effect; consequently drugs are best given in liquid form whenever this is possible or advisable. The advantages of this method are ready absorption, quick action, rapid elimination; the disadvantage, the effect on the palate if the remedy be nauseating or disagreeable.

Solids.—These include three classes: mineral drugs, vegetable substances, and organic drugs other than those derived from the vegetable kingdom. Mineral drugs are best given in the form of solution—as powders, pills, capsules, and cachets. Vegetable substances must be specially prepared by the pharmacist or chemist. The third class includes those chemical substances artificially prepared by the chemist, such as the coal-tar derivatives (antipyrin, phenacetin, antifebrin, etc.). The pharmacist's art is necessary for the preparation of most drugs. A perfect pharmaceutical preparation should be effective, so as to represent the full therapeutic value of the drug; permanent, so as to keep for at least a reasonable length of time; appear as pleasant as possible to the eye; it should not offend the palate by its taste and too bulky dose. All of us prefer a glass of pure spring water to the dirty product of the city hydrant; and patients, who are made doubly sensitive by disease, naturally prefer clear and palatable preparations. It is therefore the phar-

macist's aim to present drugs in a form which is most effective and at the same time results in the least amount of inconvenience to the patient. The druggist is just as careful about the appearance of the preparation itself, as he is about the neatness of the finished package; both often form the only gauge by which the patient can estimate his professional ability.

NOTE.—By far the simplest method of administering a solid is in the form of *powder*. We hasten in this way the solution of a substance by increasing the amount of surface exposed to the digestive juices. Not all drugs are suitable: they should be tasteless or at least have no nauseating or otherwise disagreeable effect on the palate; they must remain unaffected in air,—neither attracting nor losing moisture,—be non-volatile, and their dose should not be so large that the quantity of the powder becomes nauseating merely by its bulk. Again, some patients object to the taking of a dry powder, and another method should be selected.

(To be continued.)

HOSPITAL AND TRAINING-SCHOOL ITEMS

IN CHARGE OF
LINDA RICHARDS

As a diversion to their more arduous task of attending the sick, the nurses of the Presbyterian Hospital, Philadelphia, have constituted themselves into a fire brigade and are taking regular lessons in the art of extinguishing flames. The cause of their sudden enthusiastic activity in this direction was a recent order promulgated by the Board of Directors of the hospital to the effect that every employee in the building be initiated into the secret of handling the fire-hose. By the many nurses the order was regarded as a sort of respite from their usual duties, and was immediately hailed with unconcealed delight. For many years the question of equipping the hospital with hose and other fire paraphernalia has engrossed the attention of the directors at their monthly meetings. Continual agitation finally had the desired effect, and now the whole building is thoroughly equipped with fire-fighting devices of all descriptions.

The male employees of the hospital are quartered on the fifth floor of the building, and in case of fire they will be aroused by Night Superintendent Linton, who is situated near a large brass gong. The men seem imbued with a practical view of the new system, and go through their drills without displaying any interest whatever or admitting that the thing is a novelty.

The nurses, however, derive all sorts of pleasure from the drill, and while all shudder at the thought of a fire, they promise to do their duty when occasion requires.

THE Manhattan Maternity Hospital and Dispensary, New York City, is a gift to the poor of the East Side from a man who has long been interested in the question of the betterment of East-Side conditions. He has not only given the money to purchase the site and erect the buildings, but he has also endowed the hospital to such an extent that it will be entirely independent of other contributions.

Several possible sites for the new hospital are under consideration, but the one that will probably be selected is near Seventieth Street and First Avenue. In fact, negotiations for property in that neighborhood are now going on. As soon as the site has been selected the plans for the

buildings will be drawn and the work of putting up the hospital will begin. It is hoped to begin the work within a month and have the hospital ready for use by next year.

The buildings will occupy almost an entire block, and will include, besides a hospital, a dispensary and a training-school for nurses. The hospital will be equipped with all the most modern appliances, and will have a large corps of doctors and nurses, with accommodations for them. Most of the beds will be free, but there will be a limited number of paid beds also.

THE Union Hospital, of Lynn, Massachusetts, has bought the Tapley estate in Linwood Road, that city, consisting of a house containing twenty rooms, and a lot of land with an area of twenty-five thousand square feet.

The building is in condition for immediate occupancy, but some improvements will be made before patients are received in order to make the hospital attractive and pleasant. Forty patients can be cared for in the several private rooms and the two large wards. Several individuals have promised to donate one bed each, with all the furnishings complete, ready to receive a patient, for the privilege of naming the bed in the memory of some relative or friend. Several fraternal bodies have agreed to pay a certain sum annually to maintain a bed which shall be free to members of their order. A lay board of management is provided for by the articles of incorporation. This will consist of twelve men and twelve women, to be selected from the representative people of the city.

BY the will of Stephen Symmes, of Arlington, Massachusetts, which was offered for probate March 15 at the Middlesex Registry of Probate, the bulk of the property, amounting to about twenty-five thousand dollars, is left to found a hospital and nurses' training-school in Arlington.

The Symmes place, two and a half acres of high land with a house and farm buildings, is an ideal location for a hospital. It is about a mile from the centre of Arlington, on old Mystic Street, just off the road to Winchester. Though only a few minutes' walk from the electric cars, it is well sheltered from the travelled highway. The house overlooks the beautiful chain of Mystic lakes, with the valley parkway and the ancient Brooks estate on the other side.

The testator furthermore requests that the name Symmes, or Stephen Symmes, shall be a part of the designation of the hospital.

THE Medical College and Dispensary building of the Bellevue Hospital group, New York City, is to be changed into a maternity hospital, dispensary, and dormitory. The changes, which will be made to the

interior of the building, have been estimated to cost twenty thousand dollars. The object of this change is to bring all departments of the hospital within the Bellevue yard at East Twenty-sixth Street. At present maternity cases are cared for in a building rented by the city on Twenty-sixth Street between Second and Third Avenues. Besides involving an extra expense for rent, this causes some trouble to the hospital staff, as these wards are a block and a half away from the main hospital.

STRONG influence is being brought to bear on the Legislature of New Jersey for the passage of the pending bill to appropriate fifty thousand dollars for the construction of a State hospital for the treatment of consumption. At a hearing before the Executive Committee Dr. Flick, of Philadelphia, said that in Germany, Massachusetts, and New York it has been proven that in government sanatoriums forty per cent. or more of the cases of tuberculosis were curable. Consumption now causes one hundred thousand deaths a year in the United States. With regard to the spread of the disease, Dr. Kopp, of New York, said a consumptive in the early stages of the disease expectorates seven billion bacteria a day.

MARCH 7 fire destroyed the Astoria Institute, Astoria, New York, a retreat for men suffering from alcoholism. The big building was isolated, and although the entire fire department of the First Ward of Queens, two engines from Brooklyn, and a fireboat were summoned, the building burned down slowly, while the firemen could do little.

The fire burned so slowly that practically all the contents of the building were got out. All the patients left in order, and were driven in coaches to another near-by sanatorium.

JOHN STEWART KENNEDY, the president of the Board of Managers of the Presbyterian Hospital, New York City, is about to build and present to the hospital a modern and well-equipped home for its nurses. The building is to cost about three hundred thousand dollars, and will be located directly opposite the institution. It will be eight stories high, and is designed to contain a gymnasium, roof garden, and other accessories for the benefit of the nurses of the hospital.

THE City Council of Cedar Rapids, Iowa, has donated a tract of land two hundred by three hundred feet, corner of B Avenue and Fifth Street, to the Sisters of Mercy, who will erect during the coming season a hospital to cost not less than fifty thousand dollars. Abraham Slimmer, the noted Waverly philanthropist, has agreed to give one dollar for every dollar raised in this city by the sisters up to fifty thousand dollars. Many liberal subscriptions are now in sight.

MAIL advices received here from the Orient report that the hospital attached to the Tokyo, Japan, University was burned on January 29 and twenty-one patients were burned and eleven nurses and attendants were injured. It was a wooden structure, and there were ninety-six patients in it at the time of the fire, which burned from four to six A.M. The hospital was for the treatment of the cases of particular interest and had one hundred and fifty free beds.

THE nurses of the Massachusetts Homœopathic Hospital Training-School, Boston, have organized a Young Women's Christian Association. The society was formed October 12, 1900, and it now has a membership of twenty-six. It is felt that the association has been and will be a help and inspiration to nurses, who as a class have so little opportunity to cultivate the spiritual side of life.

A NEW brick and brownstone hospital building, five stories in height, will be erected in One-Hundred-and-Thirty-sixth Street, near Amsterdam Avenue, New York City, for the Hebrew Benevolent and Orphan Asylum Society, at an estimated cost of seventy thousand dollars. The new hospital will be used for emergency purposes, and will occupy a plot one hundred by fifty feet.

AT the town meeting in Brookline, Massachusetts, held March 27, an appropriation of eighty-six thousand five hundred dollars was unanimously voted for a new contagious hospital, with plans for early isolation of suspected cases, and comfortable quarters for those detained after the serious symptoms have passed till they can safely be permitted to mingle with well people.

A BILL was introduced in the New York Legislature to provide for the establishment of a hospital for the treatment of acute mental and nervous diseases in the city of New York, to cost not more than three million dollars, and appropriating two hundred and fifty thousand dollars for its maintenance.

THE Presbyterian Hospital, Philadelphia, treated three hundred and twelve patients in the hospital and fifteen hundred and ninety-one persons in the dispensary during the month of February. The Board of Trustees have created a department of laryngology and rhinology in the hospital and elected Dr. Arthur H. Cleaveland to take charge of it.

A SIX-STORY brick sanatorium will be built on the forty by seventy-nine feet plot, Nos. 154-156 East Seventieth Street, New York City, by Annie R. Warren, of Deerfield, Massachusetts, for the Mulhall-Warren

Company. It will cost one hundred thousand dollars. It will be equipped with a complete gymnasium and a plunge bath.

CHARLES A. FELLOWS has been awarded the contract for rebuilding Stormont Hospital, Stormont, Kansas. The portion which was destroyed by fire will be replaced on a more substantial plan than was adopted in the original building. The walls will be solid instead of veneered, and the size of the rooms will be somewhat enlarged.

ARCHITECTS have been invited to present designs for the new hospital buildings of the German General Benevolent Society to be erected on the property bounded by Noe, Castro, Ridley, and Fourteenth Streets, San Francisco. Over two hundred and fifty thousand dollars will be expended on the proposed improvements.

MISS L. L. DROWN, superintendent of Training-School, City Hospital, Boston, is having a two-months' vacation, which she is spending in Southern California. Miss Mary M. Kiddle, "South Department," Boston City Hospital, takes Miss Drown's place while she is away.

PLANS have been completed for a fifty-thousand dollar hospital at Oshkosh, Wisconsin, to be built in the business portion of the city. At the present time forty thousand dollars has been subscribed. The institution is to be operated by a stock company.

MISS MOSSER, graduate of the University Hospital Training-School, Philadelphia, has been appointed superintendent of nurses at the Medico-Chirurgical Hospital to take the place of Miss J. S. Cottle, resigned.

THE graduates of the Central Maine General Hospital Training-School have adopted a school-pin which is eliciting favorable comment. The school's motto is engraved on garlands hung on a pine-tree.

AN appropriation of forty-nine thousand seven hundred and fifty dollars has been granted for further construction of the Hospital for Insane Convicts at Dannemora, New York.

MISS ELEANOR RYAN, who for two years was in charge of the Noble Hospital, Westfield, Massachusetts, has been appointed superintendent of Heaton Hospital, Montpelier, Vermont.

MR. THOMAS W. LAWSON, of Boston, has given to two Boston charities, the West-End Nursery Hospital and the Crippled Children's Home, each five thousand dollars.

MISS ISABEL MCISAAC, of Chicago, is taking a much-needed rest, and is staying with friends in Southern California.

OFFICIAL REPORTS OF SOCIETIES

IN CHARGE OF

MARY E. THORNTON

THE CONGRESS OF NURSES

FOREIGN DELEGATES TO THE NURSES' CONGRESS.

A MOST cordial letter has been received from the president of the Australasian Trained Nurses' Association, wishing success to the Congress and informing us that their association will be represented by an official delegate, Miss S. B. McGahey.

Those who were at the World's Fair Nursing Congress will be much pleased to hear that Miss Amy Hughes, who was there as an English delegate, will again be a delegate to the Buffalo Congress. With her will come Miss C. T. Wood, equally well known by name and reputation. The organizations and interests that these delegates will be authorized to represent will be announced later. They come from the Midwives' Institute and Trained Nurses' Club, which represent a multiplicity of nursing organizations.

In a later number we expect to give sketches of the lives and work of our delegates.

THE INTERNATIONAL COUNCIL OF WOMEN

THE memorandum sent in December last by the president of the International Council of Women, Mrs. May Wright Sewall, to the presidents of the National Councils of the different countries gives a most interesting resumé of the work of this vast international body of women, with which we have allied ourselves through our membership in the National Council of Women of the United States. We ought now to familiarize ourselves with their doings, and though not all nurses can be fortunate enough to attend congresses where thoughtful women from all parts of the world meet to discuss serious themes, we can all follow the reports of their progress and cultivate an interest in the large questions which they discuss.

We learn from this memorandum that there are now National Councils of Women in the United States, Canada, Germany, Sweden, Great Britain and Ireland, Denmark, Holland, Switzerland, New Zealand, New South Wales, Tasmania, Italy, and France. These National

Councils all represent the affiliation of many separate organizations within the country itself, and they all send representatives to the International.

Austria, Greece, and Russia were represented by honorary vice-presidents, National Councils not yet being complete in those countries. Norway expects soon to be ready to enter. Mrs. Sewall says in her comments: "It is most interesting to observe that the reports from all the countries into which the council idea has been introduced show not only that it fosters internationalism, but that it strengthens the spirit of nationalism and weakens sectional antagonisms. The deepening of the sentiment of fraternity and an ever widening application of it are the certain fruits of council work."

At the Paris Exposition last summer a series of conferences was held at the head-quarters of the International Council of Women, "at which the constant theme was internationalism. The particular aspect of the subject was, How may a reciprocally profitable internationalism be promoted by women? The methods suggested were more numerous than the nationalities of the different speakers, but upon two points all, speakers and auditors alike, were unanimous. It was the common thought that the next step in the development of civilization must be such a consciousness of common interests among different nations as will make them realize that, in the language of the Master, they are indeed 'all members of one body,' that 'no member can suffer that the whole body does not suffer with it, and neither can any member be exalted that the whole body does not rejoice with it.'

"This conception of internationalism implies that antagonism shall be replaced by sympathy and competition by coöperation. If ever the subordination of the egotism of particular patriotism to the sentiment of inclusive humanity was illustrated it was in these conferences.

"One demand made by the speakers of every nation was always cheered by at least ninety per cent. of the audience,—viz., the demand for a permanent Court of Arbitration, for the cessation of war, and the substitution of peaceful for military methods. The cry of every conference was the title of Baroness von Suttener's book, 'Lay Down your Arms.'"

In the condensed reports of the different councils one finds many interesting items.

The Canadian Council was engaged by the Dominion Government to prepare a hand-book of the work of Canadian women at the exposition.

The German Council publishes a monthly magazine edited by the president.

The Danish Council also publishes a paper (in which, by the way,

may be seen from time to time notes of our nursing work and organization in America) and has adopted the principle of an equal moral standard for both sexes, for which cause it is making a strong propaganda.

Special features of the British Council are its Industrial Committee and its Employment Bureau for Educated Women.

THE INTERNATIONAL COUNCIL OF NURSES

Miss Keith Payne, matron of the Wellington District Hospital, Wellington, New Zealand, has consented to take a seat in the International Council of Nurses as honorary vice-president to represent New Zealand.

GRADUATES OF NEW YORK INFIRMARY ORGANIZE

An Alumnæ Association has been organized by the graduates of the Training-School for Nurses of the New York Infirmary for Women and Children. Meetings are to be held the first Monday in each month from October to June in the Nurses' Parlor, 327 East Fifteenth Street.

BOSTON AND MASSACHUSETTS GENERAL HOSPITAL TRAINING-SCHOOL ALUMNÆ

The regular meeting of the Alumnæ Association of the Boston and Massachusetts General Hospital Training-School for Nurses was held at the Thayer Library February 26.

After transacting the routine business, the special meeting which was called to revise the constitution convened.

There were a number of changes to be made in the old constitution, and the association is greatly indebted to the committee, Miss Florence F. Rice, Miss M. E. P. Davis, and Miss M. B. Brown, for the excellent work which they did in this revision, the most notable change being the name. There are to be eight regular meetings during the year instead of three, as formerly, and it was decided to have two forms of membership,—active and honorary. It was voted that "former superintendents of the Boston Training-School for Nurses who are eligible for membership in their own alumnæ may become honorary members of the association. Their names having been presented to the association at an annual meeting, they must be elected by a unanimous vote of the members present."

Letters of acceptance of honorary membership from Miss Linda R. Richards, Miss Anna C. Maxwell, and Miss J. E. Sangstor were read.

There has been a real revival of interest in the Alumnæ Association. Many new names have recently been added to its membership list, and it is hoped that the more frequent meetings will keep a larger number of nurses in touch with the association.

The alumnæ badge is a very attractive pin of white and gold engraved with the State seal; it is hoped all new members who have not already secured one will do so.

The course of lectures on sociological topics given during the winter was well attended. They were held in the old amphitheatre in the dome of the Massachusetts General Hospital, and proved of great interest to those who were able to attend.

STUDY COURSE OF THE ASSOCIATED ALUMNÆ

THE New York members of Associated Alumnæ met for the last time this season with the nurses of the Settlement in Henry Street on Wednesday, March 27. After an interesting outline of the purpose and work of these neighborhood houses was given by Miss Wald, Miss Dock announced she would be glad to conduct any of those present who might wish to see the out-door field of the Settlement nurses' work. It seemed that everyone was desirous to make the tour, so, having been well fortified from the tea-table presided over by Miss McDowell and Miss Wald, and beginning with the first aid room in the basement, the members were piloted across East Broadway and through Hester Street. The scene that meets the eye here is like to none other in the city, for here is the Russian Market; all along the curbing are the pushcarts with the various wares and edibles piled upon them and completely surrounded by the denizens of the tenements, so that to make any progress at all one must take to the street, and the middle of it at that; but right in the midst of this teeming population, when you are convinced that one-half not only does not know how the other half lives but that it does not care, or, worse, does not want to know, you are confronted by magnificent proof that it does care and does want to know, for here, on the site of one of the worst tenement districts, is the open-air play-ground. No comment is necessary. Go and see this spot; then will you realize that New York is at least awake to her responsibilities; someone is on night duty. Reluctantly the visitors moved on and proceeded through Allen Street to the other house in Henry Street, where, through the kindness of the gentleman who supports the house for workers connected with the Church of the Sea and Land, one floor is given over to Settlement nurses. The next point visited was the dispensary newly opened in

Mulberry Bend, and then, with a visit to the always interesting Chinese quarter, the members dispersed, each feeling that she had lived much for one short afternoon.

This finishes the study course for the year, and it is hoped that next year's work may be along the lines indicated this winter. Three very interesting clinics have been given by Drs. Elliott, Abbe, and Weir at the Presbyterian, St. Luke's, and Roosevelt Hospitals respectively, and the members are very grateful to the doctors for giving so much of their time. Thanks are due the New York Alumnæ for the entertainment provided by them on March 13 and for the interesting papers read upon that day; to the Bellvue Alumnæ for the privilege of hearing Mrs. Duryea deliver her lecture upon "Success," and to the Post-Graduate Alumnæ for a visit to the Ward's Island Hospital.

PRIVATE "NURSE"

For the benefit of the "Private Nurse" in April number the following letters are printed:

"My dear Miss Secretary: Last week the report of the third annual convention was sent me by a friend. It is just what we need to enlighten our alumnæ. They are anxious to understand the work of alumnæ associations and wish to unite with the National Association. Will you kindly send application-blank and also some reports of the Third Annual Convention for distribution among our members. Enclosed kindly find check to cover cost of reports, mailing, etc.

"Very truly,

"____ ____"

"My dear Miss Secretary: . . . The standard of nursing down here, I am told, is something dreadful; graduate nurses work for any price, ethics are unheard of, and nurses seem to have no position. If you will send me a few subscription-blanks for magazines I'll try to get some subscribers. I really feel like taking the platform.

"Very truly,

"____ ____"

These letters come from different parts of the country, and will show "Private Nurse" that she is not the only one having a hard time showing nurses the advantage of belonging to an organized body. It would seem that if a nurse who asked the question, that one with which we are so familiar, "What benefit is it? What good does it do?" would proceed to read up the record of the National Association from the time of its organization, the minutes of the conventions will tell her what has been accomplished. It does seem strange that nurses do not take hold of their organizations and build them up. Take the Journal, for in-

stance; it has a large subscription list, but how much it might be augmented if every nurse would try to obtain even one new subscriber. Why this week a nurse belonging to an alumnæ association and living in one of the large Nurses' Registries in New York City saw and heard of the JOURNAL for the first time, and the seventh number out!

OLD DOMINION ALUMNÆ

MISS CABANISS LEAVES OLD DOMINION NURSES' SCHOOL

MISS S. H. CABINISS, the founder of the Old Dominion Training-School for Nurses, has severed her connection with the Training-School. Miss Cabaniss has been in charge of the school for the past seven years, and her leaving the institution is the source of much regret to all who have been associated with her.

An enthusiastic meeting of the Old Dominion Hospital Alumnæ Association was called upon petition of four of its members at the Nurses' Club on April 1, the secretary in the chair, the president and vice-president being out of town.

The motion to appoint a committee of three to adopt resolutions regarding the resignation of our valuable and beloved superintendent, Miss S. H. Cabaniss, was unanimously carried.

The resolutions adopted are as follows:

"WHEREAS, Miss S. H. Cabaniss founded the Old Dominion Training-School for Nurses, and has had charge of same for seven years; and

"WHEREAS, She has taken the lead in raising the standard of nurses and nursing throughout the State of Virginia: be it

"*Resolved,* That the nurses of the Training-School of the Old Dominion Hospital and of the Alumnæ Association desire to convey to her their appreciation of the good work in the training-school, and of her interest in them not as a superintendent, but as a friend; also be it

"*Resolved,* That the nurses of the association desire her continued interest in them.

"CAROLINE JOHNSTON,
"C. V. AUSTIN,
"A. GULLY."

It was further voted that the resolutions be placed upon the minutes and a copy forwarded to her, and that they be published in the daily papers and THE AMERICAN JOURNAL OF NURSING.

Further, as a slight token of the association's appreciation of one who has done so much to raise the standard of nursing in the South and

who has always been ready with words of sympathy and advice, a loving-cup was voted her.

The proposition to organize a better equipped nurses' club as a home for our nurses, to provide a meeting-place for the advancement of professional work, including a reading-room supplied with daily papers and medical and nursing journals, and to provide a department for registration, etc., the same to be under the auspices of the Alumnæ Association, was laid upon the table, so as to give out-of-town nurses the opportunity to vote at next meeting. Three young women who had been in the hospital for periods varying from one to six months were reported as wearing the pupil nurses' garb and working as Old Dominion Hospital nurses. Two had shortly discarded the same. One will be written a letter by the superintendent and signed by the hospital staff and president of the Lady Board of Managers requesting her to discard the same at once. After transacting other matters of business the meeting was declared adjourned, to meet again on April 29 at four P.M.

THE NEW YORK STATE NURSES' CONVENTION.

THE New York State Nurses' Convention met in Albany on April 16. Through the courtesy of Dr. McDonald and the Mayor of the city, the Council Chamber of the City Hall was placed at the disposal of the nurses. The convention was called to order by the chairman of the State Committee on Organizing a Convention, Miss Sylveen Nye, of Buffalo, who addressed the meeting. Miss Nye said in part:

"Some one has said, 'Know what you want to do, then do it.' We have met here to form a New York State Nurses' Association, the object of which shall be to raise the standard of the nursing profession; to make better nurses; to help those of us already in the work to be broader, more intelligent, more useful; to help us to grow, to develop, for association means growth, means development.

"We believe the proper means of attaining this desired purpose is by suitable legislation: not a legislation by a few for a few, but legislation that will affect all nurses and hospitals beneficially, that will bring about better teaching, better conditions for all nurses, better nursing for all classes of people, and legal recognition of our profession. . . .

"Granted that we know what we want to do, and why, do we know how it is best to be accomplished? That brings me to the purpose of this meeting. To quote from a recent editorial of THE AMERICAN JOURNAL OF NURSING, 'the question is not, *Shall* we organize, but *How* shall we organize?'

"Again, quoting from a recent editorial in *The Trained Nurse:* 'Any New York State nurse who attends the Albany Convention may be sure of an opportunity to speak and a courteous hearing.'

"Let every woman present speak as her conscience and judgment dictate. Let us discuss things openly, slowly, carefully, and argue all things in a dignified, kindly spirit. . . ."

Miss Nye then announced that it was in order to nominate a chairman for the meetings. By a unanimous vote she was made chairman, and Miss Hall, of Jamestown, was appointed secretary and treasurer *pro tem.*

The chair then stated that the afternoon would be given up entirely to informal discussion; no votes or action would be taken until the following day; that the chief points to be discussed were the form of organization to be adopted and membership qualifications, and that at the termination of the discussion she would ask the convention to nominate a committee who should present an outline of a constitution on the following day.

The discussion which followed was confined largely to the first point, viz., form of organization. Many advocated individual membership, believing that this would give a larger and more widespread association. Others argued for local organizations with representation in the State society, on the grounds that this method gave a stronger and more orderly body. Miss Damer and Miss Palmer advanced the method adopted by a State Medical Society as showing a way to combine the two. This is, to admit individuals as members until a certain number in the same locality have joined, and then to require them to organize locally and admit future members through this local circle.

The question of membership qualifications was not taken up on the first day.

The committee appointed from the floor to present a draft of constitution was as follows:

Miss Spencer, delegate Presbyterian Hospital Alumnæ, New York City; Miss Cadmus, superintendent Faxton Hospital, Ithaca; Miss McDonnell, superintendent Albany Hospital; Miss Damer, president Buffalo Nurses' Association; Miss Allerton, superintendent Rochester Homœopathic Hospital; Miss Alline, in charge Teachers' College Course for Nurses, Columbia University; Miss Waterman, delegate Methodist Episcopal Hospital, Brooklyn; Miss Soulé, private duty; Miss Sanford, delegate Monroe County Association.

It was voted that the committee should draw up a constitution only, leaving by-laws for a later meeting.

The meeting then adjourned.

The next day the meeting was called to order at nine o'clock, and began by voting on the motion, "*Resolved,* That we do form a State Society," offered by Miss Bower, delegate Metropolitan Nurses' Club, New York. The vote was in the affirmative.

The committee then brought in their report, containing four clauses. The first stated the name, "New York State Nurses' Association." This was carried.

The second dealt with the objects of the association, which shall be furtherance of educational and professional standards, and cultivation of cordial relations with nurses of other States and other countries. [N. B.—This is only an abstract of the second clause, the exact text of which is not in our hands.] It was carried.

The third clause, being a general proposition to the effect that graduate nurses residing in New York State would be members, was voted struck out, to be covered entirely by the by-laws, for two reasons, —viz., that a membership clause is not required by incorporation papers, and that the complexity of the question made it inadvisable to deal with it generally.

The third clause was passed, providing for officers: a president, a first vice-president, a second vice-president, a secretary, and a treasurer.

A Nominating Committee was then appointed from the floor, as follows: Miss Palmer, Miss Cadmus, Miss Thornton, Miss Detwiller, Miss Dock. The election of officers followed. These were elected:

Miss Nye, president.
Miss Merritt, first vice-president.
Miss Young, second vice-president.
Miss Sanford, secretary.
Miss Thornton, treasurer.

Miss Nye graduated from the City Hospital, Indianapolis, founded the Buffalo Nurses' Club, and was its first president.

Miss Merritt is a graduate of Bellevue Hospital, is superintendent of nurses in the Brooklyn Hospital, and is a member of the Superintendents' Society and of the International Council of Nurses.

Miss Young is a graduate of the New York Hospital and represents that Alumnæ Association.

Miss Sanford is a graduate of the Rochester City Hospital and a member of the Monroe County Association.

Miss Thornton is a graduate of the Post-Graduate Hospital, New York City, and is the secretary of the Associated Alumnæ.

Miss Palmer moved that the nurses present be enrolled as charter

members of the new society, and that they each pay one dollar as initiation fee, to defray the present expenses. This was done.

Miss Damer moved that the next meeting be held in Buffalo, at a date to be fixed by the officers. Carried.

A committee of five was named from the floor to confer with the officers in drawing up by-laws.

The meeting then adjourned.

The names of those present were:

Annie Damer, delegate Buffalo Nurses' Association; Julia E. Bailey, delegate Rochester Homœopathic Hospital; Martha O'Neill, delegate St. Mary's, Brooklyn; Elizabeth C. Sanford, delegate Monroe County Association; Eunice A. Heutig, delegate City Hospital Alumnæ; Mary Brooks, Saratoga; Ida R. Palmer, New York; Annie R. Young, delegate New York Hospital Alumnæ; Emma J. Keating, Buffalo; Anna Lowell Alline, New York; Mary E. Thornton, delegate Post-Graduate Hospital Alumnæ; Christine Hall, Jamestown; Marion Detwiller, delegate Graduate Nurses, Jamestown; Eleanor A. Underhill, delegate Alumnæ S. R. Smith Infirmary, Staten Island; Elizabeth M. Burns, delegate Roosevelt Hospital Alumnæ; Lillie L. Waterman, delegate Methodist Episcopal Hospital, Brooklyn; E. H. Hall, Brooklyn; Nellie W. Lee, New York; S. V. Nye, Buffalo; L. L. Dock, delegate Alumnæ of New York Training-School attached to Bellevue Hospital; M. Isabel Merritt, Brooklyn; Mary Eva Allerton, Rochester; Sophia F. Palmer, Rochester; Anna J. Smith, delegate Alumnæ St. Luke's, New York City; Hermione D. Stone, New York; Nancy E. Cadmus, Utica; Frances Black, Rochester; Sophia Edwards Spencer, delegate Presbyterian Hospital Alumnæ, New York City; Mrs. Juliette Lee, New York; Jane G. Roberts, Utica; Gertrude B. Cleveland, Utica; Mrs. Jean Campbell, delegate Alumnæ Mt. Sinai Hospital, New York City; Laura Haltern, delegate German Hospital Alumnæ, New York City; Tillie Both, New York; Isabel Gahn, St. Lawrence State Hospital, Ogdensburg; Anne F. Jesttey, St. Lawrence State Hospital, Ogdensburg; Anna Davids, delegate Alumnæ Long Island College Hospital, Brooklyn; Helen S. Couzens, Vassar Brothers' Hospital, Vassar; Mrs. Minerva J. Martin, Albany City Hospital; James J. Coakley, delegate Alumni Mills Training-School attached to Bellevue Hospital; Annie Coughlin, May Gifford, Sara A. Burton, Mary Curtice, Rochester; Florence Hutcheson, Albany; Margaret Woodworth, Albany; Margaret Anne Soulé, Albany; Marie A. Mowat, Middletown State Hospital; Louise Bower, delegate Metropolitan Nurses' Club, New York City; E. Robertson, New York; Mrs. M. L. Smith, New York; Amy H. Schwartz, Gloversville; Lillian B. Best, Gloversville; Mrs. H. A. Staley, New York; Miss L. M. Root, New York City; Margaret M. Wallace, Rochester.

FOREIGN NEWS

IN CHARGE OF

LAVINIA L. DOCK

LETTERS

FROM OUR SPECIAL ENGLISH CORRESPONDENT

(Continued from page 523)

ARMY NURSING IN SOUTH AFRICA

To the nursing world here the topic of the hour is the care of the sick and wounded in South Africa. Following on his courageous action in making known to the public through the press the condition of our poor soldiers at the front, Mr. Burdett-Coutts, M.P., has just issued a brochure entitled "The Sick and Wounded in South Africa." It is a calm statement of facts, and will rank as a reliable reference on the subject years hence, when the heat and bitterness of party politics have died away. The book contains a valuable suggestion as to organization in future wars, namely, that base hospitals should, as pressure upon the army corps increases, be deputed to civilian care by the government. The regular medical staff, Army Sisters, or male orderlies would thus be free to move on to the front, and adequate provision would be made for the sick without maintaining an unwieldy and unduly large army corps in times of peace.

Following close upon this book came the "Report of the Hospitals Commission," which was eagerly awaited, and which is a voluminous Blue Book of 70 folios. To review this "Report" adequately I should require your whole JOURNAL, but I must tell you that the commission recommend the appointment at an early date of a departmental or other committee of experts, military and medical, to report on a number of suggestions, from which I quote those of special concern to us:

"3. The attraction to the Royal Army Medical Corps of a sufficient and regular supply of officers of good professional attainments; and the improvement of the position of the officers by the allowance of sufficient holidays; and by provisions enabling them to become adequately acquainted with the advancements in medical and surgical science; and the necessity of employing in the higher posts men selected for their merits rather than by seniority.

"4. The employment, to a greater extent than that recognized and practised until the later stages of this war, of nurses in fixed hospitals for the care of the wounded and of fever and dysenteric patients, and such others as can properly be nursed by females.

"5. The appointment of properly qualified officers of the Royal Army Medical Corps to undertake sanitary duties.

"And with regard to other matters:

"6. The improvement of existing ambulance wagons.

"7. The selection and employment of the form of hospital tents best suited for the reception of sick and wounded in a campaign."

The anomalous position of women at the present time can be gauged from the fact that though it was the duty of the commission to consider and report upon the care and treatment of the sick and wounded during the South African campaign, no trained superintendent of nursing was placed upon it to give expert assistance or practical nursing points.

So egregious did this omission appear to the leaders of the nursing profession in England, that the Matrons' Council felt compelled to bring it to the notice of the leader of the House of Commons; not with any hope, I am bound to own, that a trained nurse would be added to the members of the commission.

Nor was she!

Trained nurses on both sides the Atlantic will notice with regret that no mention is made of a nursing expert to coöperate with the military and medical experts, recommended for this committee to thrash out the question of army medical and nursing reforms.

And this at a moment when the whole world combines to acclaim a woman the greatest monarch of the ages!

UNION JACK.

[Our interesting and public-spirited correspondent does indeed put her finger here upon an inconsistency; yet it is no greater than that which obtains between the cruel and ruthless Genius of War and the cherishing and guardian care of the Woman Spirit, so that it has never been incomprehensible to us that there should be the conflict between the two. Hasten the day when civilian hospitals so abound in the realms of war, and women nurses so replace the old orderly, that the war spirit may die away and give place to a better kind of civilization.—ED.]

FROM OUR CORRESPONDENT IN ITALY

(Continued from page 447)

OSPEDALE CLINICO, NAPLES, ITALY.

The nurses take temperature, pulse, and respiration, do up the bed-patients and wash and comb the others, catheterize and give douches, prepare for surgical rounds and medical emergencies and assist at operations, distribute the medicines and give hypodermics. Of late they have even been allowed to undertake the parenchymatous hypodermic injections which the doctors here prefer for the mercurial treatment.

What they do not do I will try to explain.

They are not allowed to make temperature charts, lest they should presently usurp others of the doctors' functions, but I have taught them unofficially to keep special charts of any interesting case.

They may not make beds in the morning except for regular bed patients, the bed-making time being four P.M., and not every day of the week either. In the men's wards the servants are forbidden to turn the mattresses except on Thursdays and Sundays, though the sheets may be changed several times a day. There is carte-blanche in regard to linen. The reasons for this extraordinary

regulation are two: first, because the floors are washed daily at five A.M. by the servants, and any subsequent bed-making would nullify their work (sweeping being also prohibited), and, second, because there is so much phthisis in the wards that it is inadvisable to make much dust; for the same reason sheets are not allowed to be shaken out in the wards.

Bed baths are permitted in theory, but are merely tolerated in practice. For this reason I have to get them done in the early morning, before the directors and the ward doctors appear, lest on some inauspicious day they be prohibited altogether. And this in the women's wards. In the men's wards, although I might myself bathe any patient, the permission is not extended to my nurses, who may only wash the men's faces and hands. The general ablutions are entrusted to the servants, who take advantage of the loop-hole of escape and bathe no one. Nor can I insist.

Diets are entirely out of the province of the nurse, except in the matter of feeding helpless patients, and under no circumstances would she be allowed to enter the kitchen. Before the training is finished they will go through a course of cooking, but it will be given outside the hospital. Except in special cases, the diets consist of full rations, half rations, and liquid. There is no such thing as our soft diet, for the Neapolitans do not eat puddings or custards, and would turn in disgust from milk-toast. The full ration is: one loaf of bread, a bowl of macaroni, two pieces of meat, a glass of wine, and a plate of fruit, all distributed at the midday meal. For breakfast and supper one glass of milk is allotted to each patient, who takes it with whatever he may have saved from dinner, the macaroni only not being allowed to be kept. The ward cleaning is done by the servants, of whom there are three to each ward. Their business is to keep the place dusted, washed, and burnished, and I must say for them that, with due allowance for circumstances, they do their work well. The director does not wish the nurses to interfere with this part of the work as a rule, so that they only do it in exceptional cases. I feel the less troubled about this, as all my nurses are taught housework at home.

The disinfection of utensils, linen, etc., and the sterilization of nozzles, catheters, and instruments are entrusted to the nurses.

Medical rounds are carried on in a very delicate manner when we are present, a feature due to the refining influence of the chief. Even in the men's wards there is nothing which could shock the most puritanical mind, so that the pupils' parents, who at first stipulated that their daughters should nurse only women, now prefer these wards to the others. The only difference in the system of rounds is that the ward doctors' assistant takes down the orders instead of the head nurse. The prescriptions are written out daily for each patient by the assistant, the ward doctor signing.

The medicines, already diluted when in the liquid form, arrive at about mid-day, done up in different packets and bottles, with the number of each patient pasted on the label, where the prescription is written out in full, and the dose is enough for twenty-four hours. This arrangement was originally made, I suppose, to prevent mistakes when the servants were entrusted with the distribution of drugs. As my nurses do not remain at night, it is just as well to let it remain. There is, however, in the closet a supply of medicines which the nurses distribute after rounds, and among them are also the drugs for hypodermic use and for emergencies.

G. BAXTER.

A LINE FROM BRAZIL

A MOST friendly letter has been received from Miss Jackson, matron of the Strangers' Hospital, Rio de Janeiro, Brazil, expressing interest in the Congress, from which we quote a few lines:

"I am only sorry that I shall not be able to avail myself of that great treat (the Congress), but, unfortunately, my holiday does not fall due again until the following year, when I do hope to visit the States and go through some of the hospitals that I have heard so much about. . . .

"This part of America must be very different from yours. . . . I came out here as one of the pioneer nurses in 1892, and after two years was made matron. I can hardly describe to you the matron's duties,—everything; we have no resident medical man, so that I am responsible for all, make out all patients' accounts, keep the register, and very often have to do the cooking, as the servants have a way of leaving without any notice whatever. My staff consists of four trained nurses, one from St. Bartholomew's, my own school, one from the London, one from Guy's, and one from St. George's. I have one male nurse, trained in yellow fever only. . . . My great regret is that I shall not be able to be with you next September. If I can help in any way, please let me know, and I shall be delighted to do so. . . ."

FROM CUBA

GENERAL HOSPITAL, PUERTO PRINCIPE, CUBA.

This hospital was organized by Mrs. Quintard, assisted by Miss Mitchell, a graduate of St. Luke's. They undertook to turn this old barracks into a model hospital, and have succeeded admirably in doing so. In the first place, we are beautifully situated on the northern border of the town; the landscape all around is most attractive,—too much so, perhaps, as it is a great temptation to stand gazing out of the windows,—well, we have no windows; a pane of glass is almost an unknown quantity in Cuba, but there are immense window-frames,—and for perfectly pure air this hospital is ahead of any I have ever visited; a balmy breeze is constantly passing through the wards. It is fully equipped with the most modern of everything. The operating-room is all that could be desired, and the pharmacy is much more elaborately fixed up than the usual hospital pharmacy. There are seven American nurses and twenty-five native young women who do not know a word of English, so you will understand it is an absolute necessity for us to learn Spanish. . . .

The people in the States have an idea that Cuba is almost the most unhealthy place there is, but the opinion I have formed of it is that this part is decidedly healthy. We have no acute cases; the typhoid, pneumonia, diphtheria, and scarlet-fever germs do not seem to exist down here, and there has only been one case of yellow fever in Puerto Principe in two years. Cases of malaria, rheumatism, and tuberculosis are plentiful. The nurses, however, get a thorough surgical training. The nurses' quarters are in an old and very large building like an old Spanish castle, and are very pleasant to live in. . . .

JEAN. T. KAY
(Graduate Brooklyn Hospital).

THE NURSES IN CHINA

UNITED STATES GENERAL HOSPITAL, PEKING, CHINA, December 31.

. . . .

Miss Kemner and I are at the officers' hospital; the other four nurses are at the General Hospital, about a mile from here. They go back and forth in the ambulances twice a day, wrapped up in furs, and declare they do not feel the cold in the least.

We have been out in the ambulances several times, and are soon to visit the Forbidden City. Our troops are encamped in tents in the grounds surrounding the Temple of Agriculture. The British troops are quartered in the Temple of Heaven, while the Germans under Count Waldersee have possession of the Summer Palace. Our men consider themselves the most abused, as they are the only ones in tents this winter, but all our severe pneumonia cases have been brought from the companies living in Chinese houses, those in tents escaping thus far. . . .

You would enjoy your first ride in a Peking cart drawn by a little donkey. The cart has no springs, but is a big, box-shaped affair set on two cumbersome wheels,—the top, sides, and front covered with some gay-colored cloth, generally a shade of blue. I have tried riding in one, and it is not the most comfortable vehicle in the world. You have to sit with your feet doubled up under you in order to have room for the rest of your body to sway back and forth, bumping first on one side and then on the other, until you are bruised all over and vow you will never get in one again. . . .

The climate is very fine, except for the frequent dust-storms. Just now I hear the loud clapping of a sort of wooden tub held in the hands of a Chinese watchman who passes up and down the streets, beating on the wooden affair with a stick to frighten away thieves. They have a custom also of placing a light at the front door at night to ward off evil spirits.

About five o'clock every morning we are awakened by the loud clanging of the bells worn by the camels; you should see the string of those poor, patient animals going by loaded with coal, fruit, and other baggage.

The great wall of Peking, with its watch-towers as large as chapels and the ponderous iron gates, looks very formidable, I can assure you. The top of the wall would make quite a nice wagon-road; vehicles can pass each other without difficulty. . . .

H. MCRAE.

[Miss McRae is a graduate of a Texas hospital, and before joining the army nurses was in charge of Salome Hospital, Cuero, Texas.—ED.]

BOOK NOTICES

THE list of books received may be supplemented by fuller reviews of such books as in the opinion of the editor are of especial value to the nursing profession.

MATERNITY; INFANCY; CHILDHOOD. By John M. Keating, M.D. Published by J. B. Lippincott Co., Philadelphia.

THE NURSING AND CARE OF THE NERVOUS AND THE INSANE. By Charles K. Mills, M.D. J. B. Lippincott Co., Philadelphia.

ANOMALIES OF REFRACTION, AND OF THE MUSCLES OF THE EYE. By Flavel B. Tiffany, M.D. Hudson Kimberly Publishing Co., Kansas City, Missouri.

A TEXT-BOOK FOR TRAINING-SCHOOLS FOR NURSES. By P. M. Wise, M.D. Published by G. P. Putnam's Sons, New York.

This work is prepared with especial reference to the training of nurses in insane hospitals.

TEXT-BOOK OF MATERIA MEDICA FOR NURSES. By Lavinia L. Dock. Third edition. Published by G. P. Putnam's Sons, New York.

In this edition the metric system of dosage has been added and new drugs are given.

NURSING ETHICS. By Isabel Hampton Robb. Published by J. B. Savage, Cleveland, Ohio.

A new book by Mrs. Robb, which will be read with interest by nurses all over the world.

POCKET MEDICAL DICTIONARY. By George M. Gould, A.M., M.D. Fourth edition. Published by P. Blakiston's Son & Co., Philadelphia.

The fourth revised edition of Gould's "Pocket Medical Dictionary" has increased the volume to thirty thousand words. For nurses it is indispensable, being small, compact, and concise, a great convenience tucked in a corner of one's travelling-bag. The especial change since the third edition is the addition of a "Table of Clinical Eponymic Terms."

It is a very great comfort to know there is such an easy way of extricating herself from the depths of ignorance when the unhappy nurse encounters "Cherchewsky's disease," "Fuerbringer's sign," and various other more or less euphonious terms of like nature.

OBSTETRIC AND GYNÆCOLOGIC NURSING. By Edward P. Davis, A.M., M.D. Saunders & Co., publishers, Philadelphia.

This hand-book for nurses is one of the best of its kind we have seen, containing something over forty chapters of practical instruction. It is well illustrated, and the divisions of chapters and subjects are in excellent shape for the student nurse. Dr. Davis in his introduction speaks of a "thorough knowledge and drill in asepsis and antisepsis as being indispensable," and in the chapter upon puerperal sepsis makes this statement, which cannot be reiterated too often, "*the nurse should consider each pregnant and parturient patient as a surgical patient, and, as far as antiseptic precautions are concerned, an abortion or labor must be treated as a surgical operation.*" Viewed from this stand-point, the question naturally arises as to whether a school has either moral or educational right to give nurses obstetric training before they have had operating-room drill.

Besides the excellent chapters upon surgical apparatus, sterilization, and the preparation of dressings, sutures, room, and patient, there is much practical instruction upon the make-shifts of obstetric and surgical work in private houses, and last, but not least, timely suggestions upon a dignified demeanor in the confinement- and operating-rooms.

Every hospital, like every household, is necessarily more or less of a law unto itself, but the principles must be the same in all. A well-known obstetrician recently said that "Given a nurse and a doctor who thoroughly understand aseptic principles, the patient may be safely delivered on the door-mat."

As nurses we may be thought presuming to question any statement made by a medical author, but in Chapter IV., page 46, Dr. Davis says: "The first stage of labor extends from the first regular contractions of the uterus to the time when the membranes rupture and the greater part of the amniotic fluid escapes. During the first stage the neck and mouth of the womb gradually dilate or open." Other authorities agree in saying that the first stage of labor is "dilatation of os or cervix, beginning with the onset of labor and ending with complete expansion," without necessary relation to the rupture of membranes.

The only writer we could find who agreed with Dr. Davis was Clara Weeks in her hand-book of nursing, an authority not likely to be recognized by him.

EDITOR'S MISCELLANY

NOTICE of change of address must be sent to the office of the publisher not later than the twentieth of the month before publishing, otherwise a number lost will not be replaced.

TEACHERS' COURSE IN HOSPITAL ECONOMICS

THE prospectus for 1901-1902 for the course in Hospital Economics, Teachers' College, Columbia University, is now ready. Applicants and those who wish to know more about the course will please write for prospectus to Miss A. L. Alline, Teachers' College, Columbia University, New York City.

COMMITTEE ON ACCOMMODATION

ONE of the busiest committees of the Congress of Nurses will be the Committee on Accommodation. Already many requests for information in regard to hotels and boarding-houses are beginning to arrive.

It is planned to have some of the members of the Buffalo Nurses' Association meet all incoming day trains the first part of the week. Delegates will be escorted to head-quarters, where lodgings will be assigned them.

A register of rooming- and boarding-houses which have been previously inspected by members of the committee will be maintained.

Delegates and visitors who wish to be assured of accommodation are requested to inform the committee as early as possible of their intention to be present at the Congress, that an idea may be obtained of how many must be provided for.

The prevailing rates for lodgings will be one dollar and one dollar and fifty cents per day each person. In the building of the Women's Union on Niagara Square, where the meetings will be held, is a lunch-room, where light refreshments are served. On the opposite side of the Square is the Women's Christian Association, which will provide dinner at noon for fifty cents.

This association is also building a lodge in the neighborhood of the Exposition grounds which will accommodate several hundred.

Visitors and delegates to any of the nurses' meetings or those coming at any time during the summer to visit the Exposition are cordially invited to write for information to the "Committee on Accommodation, International Congress of Nurses, 55 West Mohawk Street, Buffalo, New York."

CORRECTIONS

In the April number of the THE AMERICAN JOURNAL OF NURSING, in the item relating to Bellevue Hospital, reference was made to a change of hours for doctors, nurses, and helpers. The word "nurses" should not have been inserted. The Training-School is distinct. It has always maintained a high standing, and has been in no way affected by any change made in other departments of the hospital; in fact, in the report of the Bellevue Hospital Committee, published in the *Medical News*, Miss Brennon's department seems to have been the only section of the hospital not heavily scored, which is a matter of pride to the host of graduates and the profession at large.

The preliminary paper bracketed before Mrs. Von Wagner's article, "Women as Sanitary Inspectors," in the last number, was written by Miss Pierson, one of the managers of the Orange Training-School. Miss Pierson is especially interested in securing the admission of women to municipal posts as sanitary inspectors under Boards of Health.

A FAIR COMPARISON

To the Editor of THE AMERICAN JOURNAL OF NURSING.

A most admirable paper was read lately before the St. John's House Debating Society, London, by Miss Mary Burr, called "Should a Nurse Pay for her Training?" In a crisp and animated style she presents the pros and cons of the nursing system in England (much of it applies here as well) and gives all the practical points on both sides.

Her conclusion is that as things are at present nurses could not justly be asked to pay for their nursing education. She lines up in straight array that which is received and that which is given by the nurse. On one side the uniforms, the board, lodging, laundry, and so-called education in nursing. Examining these, she finds that time and money may be lost through an unsuccessful probation month, that the uniform and allowances are usually not sufficient to cover all expenses, that laundry allowances are scanty, and that the food served to nurses is almost invariably bad,—either spoiled in the cooking, or badly served, or insufficient; finally, that the education given is often of the most scrappy and desultory character. Against this she places the actual care of the hospital patients taken by the nurses, and also the immense amount of ward cleaning and hospital housework which they give, their long hours of work, averaging in a week twenty-one hours more than the average workingman. She compares the circumstances of the medical student and the pupil nurse, and concludes that, if it is right to expect nurses to pay for their teaching, they may rightly expect certain conditions—viz., scrubbing and cleaning to be confined to a preparatory period; an eight- or nine-hour working day, good food, and a thoroughly good course of systematic instruction, with study and reading facilities.

ONE WHO HAS SCRUBBED.

MARRIED

MISS ETHEL ANGUS, Class of '99, Newton Hospital, Newton, Massachusetts, was married to Dr. Alfred S. Wiley, Newton Highlands, at Ottawa, Canada, March 28, 1901.

MISS ALICE JOSEPHINE SLEEPER, Newton Hospital, Class of '99, and George Moulton Frame, of Boston, were married at Washington, D. C., February 22, 1901.

DEATH OF MISS McDADE

ON January 16, after an illness of less than a week's duration, Vina McDade died of pneumonia in the Presbyterian Hospital. Miss McDade was a member of the first class that was graduated from the Presbyterian Hospital Training-School for Nurses—1894. At the end of the training she left a splendid record of work accomplished, and during this course she evidenced the executive ability that afterwards won for her the respect and admiration of so many. Miss McDade was for some time associated with the work in a private hospital, afterwards spent several years engaged in private duty, and was for two years the successful superintendent of the Hospital and Training-School at the German Hospital, Newark, New Jersey.

For the past eighteen months she was again connected with the work in this hospital. Capable, and ever ready for duty where needed, during these months she alternately filled the positions of night superintendent and head nurse of the private surgical corridor and of the women's medical wards. It was while in charge of the nursing in the latter wards that she contracted the disease that caused her death. Miss McDade's ability as a teacher, her quiet method of overcoming difficulties, her executive management, together with her cheerfulness and patience, and sympathy and tenderness towards the suffering, were beyond the average. Ready to give of her best and assume responsibility when necessary, she never failed to gain the confidence of patients and nurses.

Her death is a loss to her former patients, nearer friends, and the nursing profession at large. She was an active member of the Nurses' Alumnæ Association and took an interest in all questions pertaining to nursing work.

She had a true affection for the Presbyterian Hospital, its management and work throughout, and often expressed herself as feeling more at home and happier here than anywhere else.

The following resolutions were passed at the meeting of our Alumnæ Association held in February:

"*Resolved*, That the members of the Alumnæ Association of the Presbyterian Hospital, New York City, will hold in long and loving remembrance the name of their associate, Alvina McDade, whom it has pleased Almighty God in His infinite wisdom to remove from this earthly abode.

"*Resolved*, That we, her associates, lament her decease and extend to her family expressions of sincerest sympathy.

"*Resolved*, That the above resolutions be published in THE AMERICAN JOURNAL OF NURSING, and a copy be sent to the family of the deceased."

RESOLUTIONS UPON THE DEATH OF MISS KEYES

MISS MINNIE V. KEYES, who died at the City Hospital, Rochester, New York, on April 6, after an operation for appendicitis, was a member of the Class of '98.

At a meeting of the Alumnæ Association, held April 9, a committee was appointed to prepare and draft the following resolutions:

"WHEREAS, It has pleased our Heavenly Father to remove from our midst Miss Minnie V. Keyes, an esteemed member of our Association; therefore

"*Resolved*, That in her death our association has lost a highly esteemed and much-loved member, and the nursing profession a faithful worker.

"*Resolved*, That a copy of these resolutions be extended with our deepest sympathy to her family; that a second copy be sent to THE AMERICAN JOURNAL OF NURSING, and that a record be made of the same in the minutes of this meeting.

"E. FRICK,
"JEAN WILSON,
"E. C. SANFORD,
"Committee."

CHANGES IN THE ARMY NURSE CORPS

CHANGES IN THE ARMY NURSE CORPS RECORDED IN THE SURGEON-GENERAL'S OFFICE FOR THE MONTH ENDING APRIL 6, 1901

BAKER, ELLEN M., formerly on duty at the Santa Mesa Hospital, Manila, discharged.

Barker, Mary C., formerly on duty at the Santa Mesa Hospital, Manila, discharged.

Bowles, Rosa L., transferred from the First Reserve Hospital, Manila, to duty as chief nurse at Fort Bayard, New Mexico.

Bunting, Laura B., formerly on duty at the Second Reserve Hospital, Manila, discharged from the Nurse Corps.

Cleland, May, transferred from Dagupan to transport duty en route to the United States. Arrived in San Francisco on Logan March 29.

Clinton, Bee Agnes, recently serving temporarily at the United States Army Hospital, Presidio of San Francisco, discharged from the Army Nurse Corps.

Edmunds, Jennie S., transferred from the First Reserve Hospital, Manila, to Military Hospital, Iloilo, Philippine Islands.

Fairbanks, Helen G., promoted to be chief nurse at Military Hospital, Nueva Caceres, Philippine Islands.

Friton, Emily, transferred from Military Hospital No. 2, Peking, China, to Military Hospital No. 1, same city, March 1.

Hasemeyer, Augusta D., transferred from the First Reserve to Second Reserve Hospital, Manila, Philippine Islands.

Hasson, Esther V., transferred from Military Hospital, Vigan, to the Second Reserve Hospital, Manila, for temporary duty.

Hine, M. Estelle, arrived in San Francisco March 13 on transport duty from Manila, and sailed April 5 on return journey to the Philippines.

Howland, Mary B., formerly on duty at the United States Army General Hospital, Presidio of San Francisco, has been discharged from the Nurse Corps.

Kemmer, Alice S., transferred from Military Hospital No. 2, Peking, to Military Hospital No. 1, same city.

Kephart, Josephine H., recently on duty at Military Hospital, Calamba, Philippine Islands, discharged from the Nurse Corps.

Killiam, Lena E., transferred from Military Hospital No. 2, Peking, to Military Hospital No. 1, same city.

Klein, Amelia P., transferred from the Convalescent Hospital, Corregidor Island, to the Second Reserve Hospital, Manila, Philippine Islands.

Lane, Effie, transferred from the Military Hospital, Lucena, to the Santa Mesa Hospital, Manila, Philippine Islands.

Lasswell, Ida H., transferred from the Military Hospital No. 2, Peking, to the Military Hospital No. 1, same city.

Lindley, Laura L., transferred from the First Reserve to the Second Reserve Hospital, Manila, Philippine Islands.

Lippert, Ida Dora, transferred from the First Reserve Hospital, Manila, to the Military Hospital, Calamba, Philippine Islands.

McRae, Henrietta, transferred from Military Hospital No. 2, Peking, to Military Hospital No. 1, same city.

Meech, Marietta, transferred from First Reserve Hospital, Manila, to transport duty en route to the United States. Arrived in San Francisco March 12; now on leave of absence.

Mickle, Rebekah, promoted to be chief nurse at Military Hospital, Vigan, Philippine Islands.

Mitchell, Janet D., appointed chief nurse at Nagasaki, Japan.

Patterson, Caroline L., formerly on duty at Second Reserve Hospital, Manila, Philippine Islands, discharged from the Nurse Corps.

Pickel, Helen M., appointed chief nurse at Military Hospital, Lucena, Philippine Islands.

Rector, Josephine, transferred from the Second Reserve Hospital, Manila, to transport duty en route to the United States. Arrived in San Francisco March 17 and is now on leave of absence.

Richmond, Edith L., transferred from First Reserve Hospital, Manila, to transport duty en route to the United States. Arrived in San Francisco March 18 and sailed on return journey to the Philippines April 5.

Ruble, Minnie H., transferred from Iloilo to transport duty en route to the United States. Arrived in San Francisco March 12; now on leave of absence.

Seagran, Anna M., formerly on duty at Military Hospital, Dagupan, Philippine Islands, contract annulled January 31.

Silcott, Mary E., transferred from the First Reserve Hospital, Manila, to the Military Hospital, Iloilo, Philippine Islands.

Smith, Stella, transferred from First Reserve Hospital, Manila, to transport duty en route to the United States. Arrived in San Francisco March 29.

Stokke, Ingeborg, formerly on duty at Military Hospital, Dagupan, Philippine Islands, discharged from the Nurse Corps February 19.

Tweed, Rose A., transferred from Military Hospital, Dagupan, Philippine Islands, to duty at the First Reserve Hospital, Manila.

Welsh, Mary A., formerly on duty at the Second Reserve Hospital, Manila, Philippine Islands, discharged from the Nurse Corps.

Young, Agnes G., transferred from Military Hospital No. 2, Peking, to Military Hospital No. 1, same city.

THE EDITOR

RECENTLY the Academy of Medicine of the city of Rochester, New York, has been agitating the subject of medical inspection in the public schools. We are humiliated to have to acknowledge that the Commissioners of Education in this city have not received this proposition favorably, and the two leading newspapers have denounced it as being a scheme to secure salaried positions at public expense for medical men. A paper on this subject read by Dr. W. M. Brown, president of the Pathological Society, before the Academy of Medicine brought out many points along the lines of Miss Hay's paper in the Educational Department. From a general summing up of his paper we quote the following:

"At present medical inspection of the public schools is carried on in Boston, New York, Jersey City, Philadelphia, Chicago, Milwaukee, Minneapolis, and Salt Lake City.

"In Boston the salary is two hundred dollars per year each for fifty inspectors, averaging fourteen thousand pupils and four schools to each inspector. In New York the salary is three hundred dollars each for two hundred and six inspectors, with an average of two thousand pupils and two schools for each inspector. Salt Lake City has but one inspector, at a salary of one hundred and fifty dollars per month. Milwaukee pays fifty dollars per month.

"The infected list in New York is three per cent. of those examined. In Jersey City it is eight per cent.

"In all cities where this system prevails the rate of infectious disease has been decreased, as also has the death-rate."

Dr. Brown shows that the largest percentage of infectious diseases is among the school-children and during the school months, and he further says:

"Investigations have shown that there are at home and unreported three cases of infection for every one properly reported and isolated. Twenty per cent. of scarlet fever and measles cases leave a greater or less degree of deafness. Seven per cent. of measles cases die. Twelve per cent. of diphtheria cases die. Do our children and our homes need protection?

"The child is a racial unit. We may protect our racial integrity by protecting the children. The right of a child to hygienic surround-

ings, physical as well as mental, is paramount. Efficient and thorough medical inspection of the pupils in our schools, together with the education which such a system of medical inspection would be to the teachers, pupils, and parents in matters of hygiene and general health, must necessarily go a long way towards that ideal prophylaxis which will eradicate most disease from our midst.

"This work of medical inspection began in Boston in 1894. . . . In a school in Boston in 1897 fourteen cases of diphtheria occurred in one room. The majority were found by the inspector. Not one case developed after these were found and controlled.

"In Newark, New Jersey, five and a half per cent. of the pupils examined were infected. In St. Louis five per cent. were infected.

"In New York in one district during three weeks fourteen cases of infectious disease found in the school led to the detection of thirty-seven cases at home unreported. In eighty-five families visited where a child was absent from school forty-four cases of scarlet fever and diphtheria were found. Another inspector found eleven cases of scarlet fever, all arising from one case of so-called German measles."

Dr. Brown in conclusion says: "I believe, with Hall Caine, that this is to be a 'century of humanity,' that consumption will be wiped out, and that cholera and cancer will no more be known, or other infectious diseases."

THE meeting of the New York State Nurses, of which the official report is given on another page, marks an era in nursing history. Not more than half-a-dozen of the older women who have in the past been prominent in organization work were present, but the convention was made up of a younger generation of nurses, who showed a sense of dignity, intelligence, and general poise that promises much for the development of the New York State Society, and the broader progress of the profession at large, in the years to come.

The vital question of eligibility will be the subject for discussion at the next meeting in Buffalo, and during the months that are to intervene much serious thought must be given to the question. Registration will not be taken up until the society is complete in its organization, and in efficient working order.

THE papers on "Contagion and Disinfection" have crowded out some of the department matter this month, but we shall go on in the next number with Miss Hibbard's article, "With the Maine to South Africa," and we have for the immediate future a number of interesting papers by well-known writers, one by Dr. G. H. M. Rowe, of the Boston

City Hospital, on the management of hospital laundries, being most interesting and valuable.

We want to urge upon alumnæ officers the importance of interesting the scattered society members in the JOURNAL, and the need of having the subscription blanks always at hand at the regular meetings. We find that where the president is interested the members are sure to be, and subscriptions are greater in number from such societies.

WE have on our list the names of a number of superintendents and nurses who are ready for hospital positions, and we would like to hear from institutions which are contemplating changes. To those nurses who have not received personal replies to their letters we must take this way of explaining that the positions advertised last month have been filled, but we have placed their names on file for future reference.